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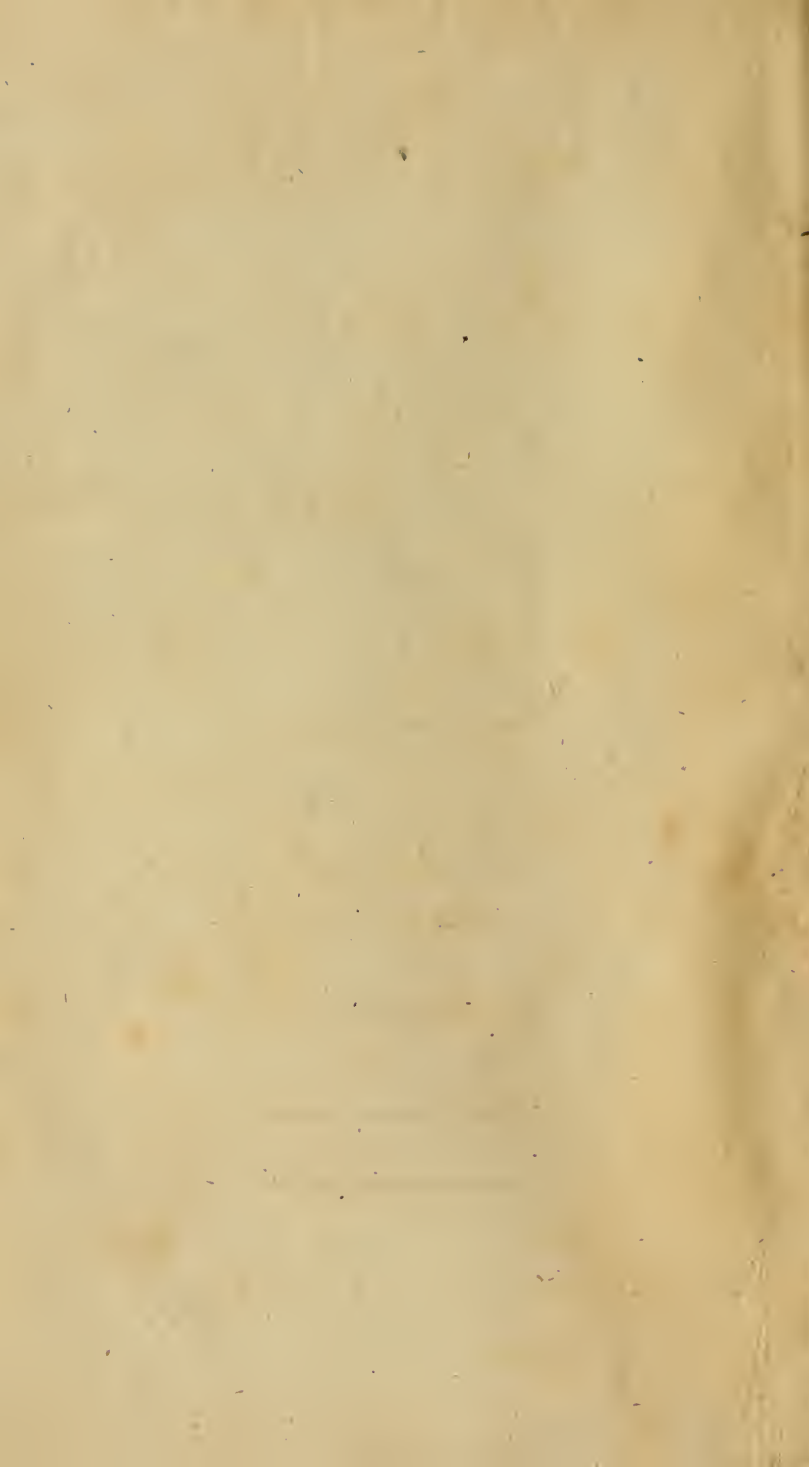


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For JANUARY, 1788.



..... "With sweetest flow'rs enrich'd,
"From various gardens cull'd with care."

* * * * *

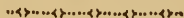
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 Mr. Ambrose Vasse.
 Mr. John Van Reed.

Right rev. William White, D. D.
 bishop of the protestant episcopal church, of the commonwealth of Pennsylvania. *
 Hon. Thomas Willing, esq. president of the bank of North America. *
 Messrs. Francis and John West.
 Kearney Wharton, esq.
 James Wilson, esq. counsellor at law.
 Mr. Anthony Weiss.

Mr. Benjamin Workman, teacher of mathematics in the university of Pennsylvania. *
 Robert Wharton, esq.
 Charles Wharton, esq.
 Mr. John Wood.
 Mr. John Woods.
 Bryan Wilkinson, esq.
 Mr. Bartholomew Wistar.
 Captain Francis White.
 Mr. James Withy.
 Mr. Seth Willis.
 Mr. David Ware.
 Mr. Wetherell.
 Mr. Robert Wilson.
 Mr. John Wilson.
 Mr. Nathaniel Wakely, Carlisle.
 Colonel William Will, member of the general assembly.
 Richard Willing, esq. member of the general assembly.
 Mr. Hezekiah Williams.
 George Wallace, esq. Fort Pitt.
 Mr. Robert Waln.
 Pelatiah Webster, esq.
 Mr. Jacob Wayne.
 Mr. John Westcott.

Samuel Young, esq. student at law.
 Samuel Young, esq.

Mr. Adam Zantzinger.
 Mr. Paul Zantzinger, Lancaster.

N. B. The names, to which this mark * is annexed, are of members of the American philosophical society.

Delaware.

Hon. John Dickinson, esq. delegate to the late continental convention.
 Hon. Richard Bassett, esq. delegate to the late convention.
 Hon. Jacob Broome, delegate to the late convention.
 Colonel Henry Neil, member of the legislative council, Lewes.
 Colonel David Hall, Lewes.
 James Black, esq. Newark.

Joseph Miller, esq. counsellor at law, Lewes.
John W. Battson, esq. counsellor at law, Lewes.
Rev. Matthew Wilfon, D. D. Lewes.

Colonel Nehemiah Tilton, Dover.
John Hyatt, esq. Newcastle co.
Dr. William Adams, Dover.
Mr. John Ferris, Wilmington.
Mr. Abel Glassford, Newcastle co.
Mr. John Holmes, Cape May.
Rev. William M'Kee, Frederica.
Mr. Cyrus Newnile, Brandywine.
Captain Joseph Poole, Wilmington.
Captain Daniel Rodney, Lewes.
Dr. James Sykes, Dover.
Mr. John Moore.
Mr. James Lea, Wilmington.
James Gibbons, esq. Wilmington.

Maryland.

Rev. Patrick Allifon, D. D.
Dr. Andrew Aitken.

Mr. Andrew Buchanan.
Mr. James Buchanan.
John Beale Bordley, esq. Talbot court-house.
Mr. Gilbert Bigger.
Mr. Joshua Blakeley.
Mr. Paul Bentaleu.
Samuel Blanchard, esq.
Dr. Boyd.

Mr. Robert Cockerton, Chester town.
Mr. Q. Christian, Talbot court-house.
Hans Creevey, esq.
Mr. Nicholas Coleman.

Henry Dickinson, esq. Caroline co.

Andrew Skinner Ennals, esq.

Mr. Joseph Foreman, Chestertown.
Mr. William Fulton, junior.

Mr. Samuel Green, Annapolis.

Robert Goldsborough, esq. Talbot co.
Robert Gilmore, esq.
Mr. Peter Garts.
Philip Graybell, esq.
Mr. William Goddard.

William Hayward, esq. Talbot court house.
William Hammond, esq.
Zebulon Hollingsworth, esq. counsellor at law.
Mr. John Hammond.
Mr. Edward Halfey.
Captain William Howell.

Mr. Thomas Jones, Fredericktown.

John Kean, esq. Queen Anne's co.
George P. Keeports, esq.

Pereg Lethrbury, esq. Chester town.
Mr. Benjamin Laming.

James M'Henry, esq. L. L. D.
Samuel Magill, esq. Charles-township, Cecil county.
Dr. Ennals Martin, Talbot court-house.
Mr. Daniel M'Curtin, Chester town.
Mr. James Rouere Morris, Snowhill.
Mr. Thomas M'Kimm.
James M'Culloh, esq.
Mr. Henry Miller.

Dr. John Neil, Snowhill.
William Neilson, esq. Cecil Cross-roads.

Isaac Perkins, esq. Kent co.
Mr. Mark Pringle.
Mr. Thomas Peters.
William Patterfon, esq.

Dr. John Rofs.
Mr. Walter Roe.
Colonel Nicholas Rogers.
Mr. Joseph Rice.
Thomas Ruffel, esq.

Major J. Swan.
Samuel Smith, esq.
Thorowgood Smith, esq.

Mr. John Spear.
 Mr. Thomas Usher.
 Stephen Wilson, esq.
 General Otho H. Williams.

Virginia.

His Excellency GENERAL
 WASHINGTON, ESQ.
 L. L. D. late general and com-
 mander in chief of the armies of
 the united states of America, mar-
 shal of France, &c. &c. &c.

His excellency Edmond Randolph,
 esq. governor, and delegate to the
 late continental convention.

Hon. James Madison, esq. delegate
 to ditto, and to congress.

Hon. James M'Clurg, delegate to do.
 John Beckley, esq. clerk to the
 house of delegates, and delegate to
 said convention.

John Hopkins, esq. continental trea-
 surer, Richmond.

Joseph Holmes, esq. Winchester.

Mr. John Wharton, Accomack.

Captain Mason, Alexandria.

William Holbourne, esq. Alexandria.

Messrs. Cochran and Mitchell, Col-
 chester.

North Carolina.

Hon. Alexander Martin, late go-
 vernor, and delegate to the late
 convention.

Hon. Richard Dobbs Spraight, esq.
 delegate to the late convention.

Hon. William R. Davie, esq. dele-
 gate to the late convention.

Colonel Robert Burton, member of
 the executive council.

Messrs. Hodge and Blanchard, New-
 bern.

South Carolina,

Hon. brigadier general Charles Cotes-
 worth Pinckney, delegate to the
 late continental convention.

David Ramsay, esq. member of the
 house of representatives.

Hon. Charles Pinckney, esq. dele-
 gate to the late continental con-
 vention.

Georgia.

Hon. William Few, esq. delegate to
 the late continental convention.

Mr. Isaac Briggs.

Kentucke.

Daniel Broadhead, esq.

Mr. Thomas January.

EUROPE.

Dublin.

Mr. Hugh Holmes.

Mr. Anthony Franklin.

Mr. John Rice.

Mr. John Carey.

Rev. James Carey.

Thomas Bell, esq.

London.

Dr. Thomas Pole.

Jeremiah Farrel, esq. L. L. D.

Paris.

Hon. Thomas Jefferson, esq. minis-
 ter plenipotentiary from the united
 states to the court of France.

Monfieur Mallet du Par L'aïse.

Milan.

Count Castiglioni.

Amsterdam.

M. de la Byrde.

THE ISLANDS.

New Providence.

Messrs. Peter Dean and co.

Mr. John Wells.

Jeremiah Tinker, esq.

Madeira.

John Marsden Pintard, esq. com-
 mercial agent for the united states.

Tortola.

Captain Walter Sheen.

Trinidad.

Mr. Moses Young.

St. Croix.

Mr. Severin Erichson.

* * In the foregoing list, those gen-
 tlemen, whose places of residence are not
 mentioned, live in the capitals of the
 respective states.

P R E F A C E.

THE commencement of the third volume of this work, affords the printer a favourable opportunity, which he embraces with much satisfaction, of returning his grateful acknowledgments to his numerous and respectable patrons, for the increased encouragement it has met with during the publication of the last volume. He draws from thence a flattering inference that his earnest endeavours to please, have not been unsuccessful.

At the instance of a number of subscribers, who suggested that a recapitulation of the most important events of each month would render the Museum much more satisfactory and useful, he added to the last volume a chronicle for the six months of its publication. He has also given in the present number a copious detail of subsequent intelligence—which mode he means to pursue regularly henceforward. This, with the political and miscellaneous pieces contained in the work, will render it in some measure a history, or register of the times. Those, who by situation or circumstances are precluded from an opportunity of inspecting the newspapers, will find this alteration attended with particular advantages; as they will be thereby enabled to take in at one view the transactions of each month: and it is too obvious to need comment, that monthly intelligencers compensate by authenticity, for what they want of novelty—as their editors may cull the *grain of truth*, from the *chaff of rumour, hearsays, and lies*, which inevitably occupy a large portion of all newspapers.

No collection has yet been made of the letters of commanders—the accounts of battles, &c.—in a word, of the multifarious authentic state papers, published during the late war. These are scattered in perishable newspapers, or, by a few gentlemen of taste and public spirit, collected in their libraries, and, from the nature of things, must yearly diminish, thro' the various accidents to which such detached, unprotected pieces are ever liable. Posterity will lament the inattention of their ancestors on so important a point—and the history of the most important revolution that ever took place, will probably in many places be involved in obscurity, for want of papers at present little prized or regarded. For the prevention of this consequence, at least in part, the American Museum appears to be a repository well calculated. It was therefore the printer's intention to appropriate a reasonable portion of each number, beginning with the present, for the preservation of the kind of writings above specified, proceeding in chronological order; but on examination of his materials, he finds they are not adequate to the plan—and is therefore under the necessity of deferring this measure, until he can procure some further supplies, which, he hopes, will be in a few months, as several gentlemen, possessed of extensive collections of pamphlets, newspapers, and M. S. S. have kindly promised him their assistance.

In no part of the plan has he found the path so thorny and difficult as with respect to publications on that grand subject, the new constitution; the discussion of which has been attended with such heat and animosity as are to be regretted. Three modes of conduct successively suggested themselves, to each of which appeared forcible objections. The first was, to exclude all essays on both sides. This would have been pusillanimous, and debarred the work of one of its greatest advantages. The next was, to insert no pieces but such as, in his opinion, were on the right side of the question, i. e. in favour of the constitution. This would have extended the discretionary power, which the true and genuine liberty of the press, vests in a printer, to too great a degree, and, if justifiable in one case, would be equally so in all, which would generate a most intolerable abuse—by making the printers despots—not legal rulers of the press.

The last mode, which is the one he has followed, was, to insert valuable pieces on each side, giving precedence to official, authenticated papers. This, he expected, would offend those zealots of both parties, who regard a difference in sentiment as an inexcusable crime. Nor has he been deceived. Such people have loudly complained*. But while he receives the approbation of the candid and the moderate, whom alone he is ambitious to please, he shall rest satisfied under the censures of the intemperate, the intriguing, and the violent.

He concludes with assuring his respected encouragers, that he no longer hopes for a continuance of their favours, than they shall find him endeavouring to merit them, by all the care and attention in his power to bestow.

* However singular it may appear, it is not the less true, that he lost a few subscribers for having inserted the address of the minority of the state convention—and lost others, for inserting none but official pieces against the constitution, while he inserted anonymous ones in favour of it!—But the fable of the miller, his son, and his ass, has early taught him not to attempt, much less to expect, to please every reader.

THE
AMERICAN MUSEUM,

For JANUARY 1788.



An oration, in commemoration of the independence of the united states of North America, delivered July 4, 1787, at the reformed calvinist church in Philadelphia, by James Campbell, esq. To which is prefixed an introductory prayer, by the rev. William Rogers, A. M. Published at the request of the Pennsylvania society of the Cincinnati.

Introductory prayer.

SUPREME great and infinitely glorious Lord our God! from everlasting to everlasting thou art the same! unchangeable in thy nature, in thy word, and in all thy works! clothed with light as with a garment, and with majesty as with a robe! who makest the clouds thy chariot, and walkest upon the wings of the wind! possessed of every adorable attribute and divine perfection.

We, thy unworthy but dependent children, assembled on this joyful occasion, humbly desire to approach the throne of thy grace, in and through the merit of thy coequal son, our ever blessed Saviour! for his sake, be pleased to pardon our manifold sins, and to blot out all our transgressions! justify our persons through Immanuel's righteousness, and sanctify our natures by the powerful influences of thy most holy spirit! may we wholly

be devoted to thy service, and live uniformly to thy praise!

With united hearts, and uplifted voices, we render unfeigned thanks to thy name, O thou sovereign Ruler of all worlds, for those numberless mercies wherewith we have been and continue to be visited! we adore thee for thy creating power, preserving goodness, and redeeming love! suffer us never to forget any of thy favours, as we are altogether undeserving, even of the least! particularly, O God! are the inhabitants of these states, on this day, under the strongest obligations to bless thy name, for that liberty, civil and religious, which they so fully enjoy! we would join the general body, and ascribe praise and thanksgiving to thy adorable Majesty, for this auspicious anniversary, a day long to be remembered by us and future generations! a day, whereon this extensive continent was, by the representatives of a numerous and oppressed people, declared free and independent!—Heaven approved the declaration, our arms were crowned with success, sweet peace hath visited our borders, the soldier once more became the citizen; retiring, without regret, from stations of command, our military officers returned with cheerfulness to the several duties of domestic and tranquil life! our ears are no more

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pierced with the confused noise of war, our eyes are no longer pained with the horrid spectacle of garments roll'd in blood. While we thus thankfully acknowledge thy reiterated favours in our political hemisphere, we beg leave also to mention thy providential smiles in crowning the year with thy goodness, and causing thy paths to drop fatness; "Our pastures are clothed with flocks, our fields are covered over with corn and with wheat, our husbandmen shout for joy, yea they also sing."

That we may continue to enjoy these important blessings; be pleased, O Lord, to visit all the nations of the earth, and incline their hearts to peace and love; shower down upon them thy heavenly grace; may they know thee as the King of kings and Lord of lords! in an especial manner, do thou visit our land, graciously regard our country, protect and defend our infant, but hitherto highly-favoured empire, bless our congress, smile upon each particular state of the union; may those who are in authority rule in thy fear, prove a terror to evil doers and a praise to them who do well! as this is a period, O Lord! big with events, impenetrable by any human scrutiny, we fervently recommend to thy fatherly notice that august body, assembled in this city, who compose our federal convention; will it please thee, O thou eternal I am! to favour them from day to day with thy immediate presence; be thou their wisdom and their strength! enable them to devise such measures as may prove happily instrumental for healing all divisions and promoting the good of the great whole; incline the hearts of all the people to receive with pleasure, combined with a determination to carry into execution, whatever these thy servants may wisely recommend; that the united states of America may furnish the world with one example

of a free and permanent government, which shall be the result of human and mutual deliberation, and which shall not, like all other governments, whether ancient or modern, spring out of mere chance, or be established by force. May we triumph in the cheering prospect of being completely delivered from anarchy, and continue, under the influence of republican virtue, to partake of all the blessings of cultivated and civilized society! in tender mercy bless this commonwealth, the president, vice president, and supreme executive council, our legislative body, and the respective judicial departments!

Finally, we commend to thy paternal regard, all orders of men, all seminaries of useful learning, the ministers of thy gospel of every denomination, the church of Christ, and all for whom we ought to pray. With heart-felt gratitude we anticipate the glorious era, when instead of the thorn shall come up the fir tree, instead of the briar shall come up the myrtle tree, and wisdom and knowledge shall be the stability of the times, both in church and state.

Prepare us, O Lord, most holy! for every dispensation of thy righteous providence, for life, for death, for judgment, and the joys of paradise—Humbly intreating thy gracious assistance, in suitably discharging all those duties enjoined us by thy word, and enforced by thy authority, we close this, our solemn address, by saying, as our Lord and Saviour Jesus Christ has taught us—

Our Father, who art in heaven; hallowed be thy name. Thy kingdom come. Thy will be done on earth as it is in heaven. Give us this day our daily bread. And forgive us our trespasses, as we forgive them who trespass against us. And lead us not into temptation; but deliver us from evil. For thine is the kingdom, and the power, and the glory, for ever and ever. Amen.

D E D I C A T I O N.

*To the honourable Thomas M^cKean,
esq. doctor of laws, and chief justice
of the state of Pennsylvania.*

Sir,

A S a publication of the following sheets is requested by a society, whose wish bears with me the weight of a command, permit me to beg that your name may accompany it. I am the more induced to make this request, as the distinguished share you have had in our national councils, the presidency your important office gives you over almost every blessing which freedom and independence can bestow; and your unremitted exertions, official and personal, in establishing that great event, to commemorate which was the design of this performance, all join to designate you the most proper person to whom I can look for patronage. Unaccustomed to write, and never having spoken publicly before, it was neither my object or expectation to rise to applause; my hopes were negative; and to escape censure is my utmost wish. With sentiments of the highest respect,

I have the honour to be, sir,

your obedient humble servant,

JAMES CAMPBELL.

An oration, &c.

IT is so much a rule of modern declamation to make the exordium to consist of personal apology, that any departure from it might, I fear, be deemed a violation of that respect which is held to be due from a speaker to an audience; and indeed if there ever was propriety in the rule itself, or justice in the popular construction of its omission, I feel it to be at this very moment, when I have so much occasion to intreat, and you so much room to extend your indulgence, and when not to express,

would be in some degree not to feel that deference which the presence of such an assembly can never fail to inspire.

Sensible, then, as I am, of the difficulty of the task which your partiality has commanded me to perform, and conscious of my inequality to discharge it as I ought, I am left without an alternative but to make choice of a subject, which from the relation it bears to the purposes of your institution as well as the occasion we are now convened to commemorate, will in some degree insure to me that candour and attention which, were I to rest on any abstracted efforts of my own, must necessarily be withheld.

This subject, gentlemen, you will at once anticipate, in reflecting on the advantages which have resulted to mankind from the independence of America. A summary recital of those advantages will constitute the principal object of my present enquiry and discussion.

Our petitions and remonstrances having been rejected, and insult being added to injury, it became at once essential to our safety and freedom to burst the bonds of dependence and shake off the yoke of foreign legislation. It was this bold but necessary measure which gave us rank among nations. It was this that emancipated us from military law, and rescued us from all the horrors of slavery. Had not this act and the events which it drew after it, taken place, how very different at present would have been our situation. In place of contemplating the majesty of a free people, convened in awful simplicity to consult their safety and promote their happiness, we should have beheld the pomp and extravagance of royal governors trampling upon the sacred rights of the people, and treating them in all their acts of power as if they were created only to minister to their pride or ambition.

The property of our merchants would have been held by a precarious tenure—our country would no longer have been cultivated by the proprietors and sovereigns of the soil—a farmer and a slave would have been synonymous terms. If then, such would have been our situation in a state of subjugation to Great Britain, how much have we gained by a separation from her! Welcome then the glorious anniversary of American independence—for ever welcome be the return of that day which made us citizens of a republic, and gave us a rank in the scale of being—high—above the subjects of a monarchy. To comprehend the dignity of a republican, turn to the page of history, and contemplate the different characters of the freemen of Greece and Rome, and the slaves of the Egyptian and Persian empires—or compare the speeches of a Cicero and a Cato with the servile addresses of the parasites who surrounded the thrones of the Roman emperors. But why should we travel back to antiquity for examples of the dignity of conduct and sentiment inspired by a republican form of government?—we have beheld the citizens of the united states raised by their personal interest in the government of their country to a pitch of glory which has excited the admiration of half the globe. It was the spirit of republican liberty that animated the patriot in the cabinet, and supported the American soldier under all his sufferings in the field, during a long and arduous war. It is the same patriotic spirit which has convened the members of our federal convention, at the expense of private ease and fortune, to supply the defects of our confederation—to prop the tottering fabric of our union, and to lay the foundations of national safety and happiness—Illustrious senate, to you your country looks with anxious expectation—on your decisions she rests—

convinced that men who cut the cords of foreign legislation are competent to framing a system of government which will embrace all interests, call forth our resources, and establish our credit:—But in every plan for improvement or reformation, may an attachment to the principles of our present government be the characteristic of an American; and may every proposition to add kingly power to our federal system be regarded as treason to the liberties of our country.

Another advantage derived from our independence consists in the expansion it has given the human mind, and the new fields it has opened for enquiry, especially on the interesting subjects of government. While only a third part of legislation was in our hands, it is not a subject of wonder that we were deficient in many of its principles; but since all the powers of government have devolved upon us, how many proofs of knowledge have been given in this science—witness the wisdom and energy of many of our constitutions, and witness the literary productions of those illustrious civilians, Jefferson and Adams, whose works are not only calculated to instruct their countrymen, but to enlighten Europe and posterity in the great science of social and political happiness;—nor have our studies and enquiries since the declaration of independence been confined to government: science has flourished in all its branches—the American historian records the events of our revolution with classical elegance, and her poets celebrate in all the harmony of verse the glorious achievements of her sons.

By a separation from Britain we have increased our resources for knowledge:—Witness the numerous colleges, academies and literary societies that have been established since the peace throughout the union. These institutions, so fruitful of

public and private happiness, have arisen entirely from a conviction that knowledge is essential to the preservation of a republican form of government.

Our separation from Great Britain has extended the empire of humanity: no longer shall the wretched African be torn from his peaceful habitation, to fertilize with his tears the soil of a people professing themselves advocates for universal freedom—the time is not far distant when our sister states, in imitation of our example, shall change their vassals into subjects.

Our national independence has opened the avenues of commerce with every part of the world, and thereby not only lessened the price of our imports, but added to the value of our products. Nor is this the only advantage we have derived from the extension of our trade: It was not less the policy than the interest of Britain to instil into our minds national prejudices, and to teach us to regard all mankind, except Englishmen, as our enemies; but happily this prejudice is removed, and we now view the whole human race as members of one great and extensive family, however much they may be distinguished from us by the circumstances of distance, colour, or religion. The Frenchman and the American (till lately considered hereditary enemies) now embrace each other as children of the same father—the European catholic and the American protestant review with equal horror the times when their ancestors embued their hands in each others blood, and now join to cancel the remembrance of them in mutual acts of charity and benevolence. Nor has this intercourse been restricted to Europe: the inhabitants of China, Bengal, and the united states, have met together on the sands of India; and by the influence of commerce, have added the

ties of interest to the obligations of universal benevolence.

Another, and a principal advantage of our independence, results from the material change it has wrought on the opinions, conduct, and government of the European nations. It was by contemplating our independence that France has become the land of free enquiry and general toleration. Germany, from the same cause, has shaken off an immense load of religious prejudice and bigotry. Spain has caught our spirit of enterprise and innovation; and even Britain herself has been taught, by our successful struggle, to relax in her system of general subjugation; hence Ireland enjoys what she had long demanded in vain—an exercise of her natural rights to commerce, liberty, and independence. Propitious era! happy event! which has softened the rigours of tyranny, and taught even kings to revere the great laws of justice and equity.

Thus have I endeavoured to point out some of the principal benefits of American independence: but methinks, I am asked, why do we hear of such universal discontents throughout the continent? why does the farmer languish beneath the weight of taxes, and the merchant complain of the decay of trade? why are the bands of our federal government so weak, and our credit and character the sport of foreign nations? these things, however true, do not militate with any proposition I have advanced. Where is the nation that ever became suddenly wise, great and respectable? history answers, none. Greece boasted her Amphyction, her Solon, and Lycurgus, and yet we find her approaches to order less rapid than ours. Rome had a Romulus, to frame her constitution; and yet, while she conquered the world, there subsisted within her walls a civil war. The seditions of the

Gracchi were more sanguinary, and not less threatening, than any we have felt. View Cæsar first defending, and then endeavouring to subvert the constitution of his country. Exult that the leader of our legions had nobler objects in view than a sceptre or a diadem. Though Russia is now a great and happy nation, though she holds in one hand the scourge of the Turk, and the balance of Europe in the other, yet the banks of the Neisser and the Larga will witness that her road to empire and order has been slow and difficult. Holland did not, until after forty years struggle, attain to independence ; and frequent disorders since, have taught her that national stability is of slow growth. And how often has the British throne shook to its centre, before she arrived at her present situation ! Her history is chequered from the conquest by Cæsar, to the present day. One king exiled, another beheaded ; now a republic, and then a monarchy ; this reign drained of men and treasure by an ambitious prince, smitten with a rage for foreign conquest ; the next streaming with the blood of her sons, probed in every vein, by the dagger of domestic faction ; the fields of Hastings and of Bosworth lay on the road to her present order. Rebellion has more than once stalked at large through the land ; their government has been insulted by a Monmouth, and trampled on by a Cromwell. And shall we, who have but just become a nation, expect to meet with nothing but tranquility and order ? To establish a new form of government, to eradicate ancient prejudices, to remove the effects of a war, began with the sanctions of authority, and conducted chiefly by voluntary association, and to unite opinions and habits with new situations, must be the work of time. Our constitutions were made upon

the spur of the occasion, with a bayonet at our breasts, and in the infancy of our knowledge of government and its principles ; it is not, therefore, matter of surprise that they are not more perfect, or more generally accommodated to the temper of our citizens. The distresses, of which we complain, are wholly artificial ; an anti-republican passion for foreign luxuries has exhausted our country of its gold and silver ; a rage for paper money has checked credit, locked up the remains of our specie, substituted speculation for labour, and taught us to prey upon one another. The seed of independence, like many other seeds, may, for a while, disappear ; but it will yet spring and flourish with strength and beauty : like the venerable oak, it may probably require centuries to grow, in order to be centuries in flourishing, and centuries in decaying. How fallen would be the character we have acquired in the establishment of our liberties, if we discover inability to form a suitable government to preserve them ? Is the science of government so difficult, that we have not men among us, capable of unfolding its mysteries, and binding our states together by mutual interests and obligations ? or is knowledge in legislation confined to kings and ministers ? There was a time when these questions would have kindled rage and resentment in every American bosom.

Let us for a moment compare the present situation of America with what it was in 1775 : she was then without force, without union, without an ally, and Great Britain was her enemy ; and yet, under all these disadvantages, she rose to glory and independence. At present, she is at peace with the whole world ; France, the most powerful nation in Europe, is her faithful ally ; she is in possession of eleven years experience in government ; she is united in her

objects ; has, almost, no army to maintain, no enemy to oppose ; who then, but a willing infidel, can doubt her future greatness ? But our present situation is still more strongly contrasted by the gloom of 1779—distracted in our councils, our money hastening to extinction, our army on the eve of dissolution, and a powerful enemy in the bowels of our country ; yet we surmounted these difficulties, and triumphed in the peace of 1783. There are clouds and storms in the political as well as the natural hemisphere ; to weak and timid minds only are they big with terror ; the true politician views them as the means of purifying the political atmosphere, and promoting the growth and stability of government. These, gentlemen of the society, are, I am sure, your sentiments. It was to perpetuate the remembrance of events immediately connected with the day, of which this is the anniversary, that we united ; it is to transmit to posterity the principles of that day we continue our association ; and although we have sheathed our swords, and gone back to the pursuits of private life, it remains for us to remember, that the same exertions may be necessary to defend and preserve, which were so successfully employed in establishing our independence and peace ; and that as soldiers of a republic, our work is incomplete, while national dangers exist on any quarter. In casting my eye back upon the scenes of danger and distress out of which our society grew, I am insensibly led to pay a tribute of respect to the memory of such as sealed their attachment to the liberties of our country with their lives. Though, scattered from the plains of Abraham to the sands of Georgia, no monument be raised to point their reliques to the passing stranger, yet laurels shall bloom around their graves, and while gratitude or justice shall rule the remem-

brance of human action, the brilliant story of their fame will retain its lustre, and pass to posterity in the full splendor of glory.

To detail their several merits, would exhaust eulogium, and far transcends my powers of panegyric. It will not, however, be deemed a trespass on your indulgence, should I offer the tribute of acknowledgment to an individual, whose worth will for ever endear his memory to our country. This is not the partial praise of professional predilection ; it is a sentiment to which, I am persuaded, my audience will grant a grateful assent, when informed that it refers to that distinguished citizen and soldier, general Greene.

Great in the beneficent arts of peace, he was the hope of his country, and unsurpassed in the active operations of war, he has been justly styled, “ her sword, and the keen avenger of her wrongs.” With a mind to counsel, and an arm to execute the greatest purposes of public determination, he united a heart, honest in all its intentions, and firmly prepared to sustain the rudest reverse of fortune.

When disciplined valour had defeated our troops, and desolation marched in the train of war—when the sword had thinned our broken ranks, and dismay distracted the civil authority—when conquest and confidence were opposed to defeat and despondency—in this dark crisis of southern disaster, was he called on to stem the torrent of victory, and avert the horrors of impending subjugation.

With prompt obedience to the orders of his illustrious chief, he hastens to execute the duties of his appointment, and at the head of an enfeebled, though gallant army, he displays a conduct consummate in all its objects ; supported by a courage ardent as the sword he drew, removing alarm and restoring confidence, he grafts an

emboldened militia on the stump of that war-wasted corps, whose bravery, under every pressure of adverse fortune, had firmly upheld the standard of freedom ; with these, he advanced to meet an enemy elate with conquest, and assured of success.

Discipline having resumed its station in our ranks, the astonished Briton is taught to respect the foe he so lately despised, and his predatory bands, retrained to operations of collective force, no longer desolate our guarded fields.

The exiled inhabitants return to their deserted dwellings, and separated kindred again enjoy the blissful society of domestic peace. The anxious father revisits his distressed family, and, permitted in quiet to make provision for their support, he returns with zeal and ardour to the service of his country ; private happiness is improved into general welfare ; the husbandman, assured of the advantages which must result from the guidance of such a leader, mingles with alacrity in the ranks of war, and braves with ardour, every danger of the field ; vigilance increases to enterprize, and resistance is roused to retaliation ; invasion is changed in its course, and rushes with impetuous recoil in an opposite direction ; detachments captured, and garrisons reduced, announce its rapid approach, and urge retreat to the Briton, as the last refuge from its fury ; impressed with the conviction of Eutaw, he seeks shelter within his entrenchments, nor longer dares an opposition in the field. Alike attentive to the duties of citizenship, as ardent in the accomplishment of his military pursuits, the gallant Greene devotes his talents and his leisure to the restoration of tranquility, and the maintenance of civil privilege ; his conquering troops indulge not in excess, nor riot in the peasant's toil ; contented to share with their chief in the scanty allow-

ance of the camp, victory brings no other benefit to them than the reflection, that they had done their duty. Such, my fellow citizens, was the hero, whose actions will be admired while patriotism and military worth preserve their rank in human estimation, and whose services entitle him to the eternal gratitude of America. If such was the chief, appointed to conduct the momentous duties of that dangerous department, how much to be admired is that wisdom, whose early penetration directed to the choice, and whose friendship maintained, through every change of fortune, an unshaken affection and esteem ! The presence of that great character forbids encomium, and the remembrance of his merit is too deeply engraven ever to be effaced.

Placing, then, a proper value on the blessings which the efforts of such illustrious citizens have procured, our counsellors have not planned the happiness of their country without effect, nor have the martyrs of freedom bled in vain. No, my fellow citizens, from their ashes, enriched by their blood, the tree of liberty shall yet grow and flourish among us. Methinks I already see a stately fabric of a free and vigorous government rising out of the wisdom of the federal convention. I behold order and contentment pervading every part of the united states ; our forests falling before the hand of labour ; our fields doubling their increase, from the effects of well-directed industry ; our villages enlivened by useful manufactures, and our citizens thriving under foreign and domestic commerce. I behold millions of freemen, covering the shores of our rivers and lakes with all the arts and enjoyments of civilized life, and on the anniversary of this day, 1887, shouting forth the praises of the heroes and patriots, who, in 1776, secured and extended to them all their happiness.

An address delivered in the young ladies' academy, at Philadelphia, on February 8th, 1787, at the close of a public examination. By the rev. Samuel Magaw, D. D. rector of St. Paul's church, and vice-provost of the university of Pennsylvania.—Published by desire of the visitors of said academy.

HAVING stepped in on this agreeable occasion, may I be permitted to yield, for a few moments, to the impulse which I feel upon my mind? It is the impulse of complacency, combined with a desire to follow you, honoured citizens, in bearing the testimony due to this rising institution.

Education is unquestionably, a matter of very great importance in human society. It is the groundwork on which the temple of happiness may rise—well proportioned, beautiful, and lasting.

A judicious and liberal care, however, is requisite, with regard to the objects of education; the time of life most proper for it; and the manner in which it ought to be conducted.

I beg leave to hazard a few thoughts, which have, chiefly, a relation to the first particular.

Here, we have, generally, been deficient, and too confined. It is easy to discern, in what respect.—Schools and academies there are, intended for training up boys, and young gentlemen, in sundry branches of useful learning: but female instruction hath been left, as it were, to chance; or conducted very little farther than through the lowest forms. As if of trivial moment, no great deal hath been said about it; and still less accomplished. Seldom hath it called forth more than some scattered vague remarks, and ineffectual, spiritless endeavours.

It merits more attention than this.

Vol. III. No. I.

An inspired writer, expressing the felicity of having well instructed sons, by the beautiful metaphor of “plants grown up in their youth;” connects therewith, the elegance and grace of “our daughters, polished after the similitude of a palace.”

That female minds are capable of great improvement, will certainly be allowed. The benefit and satisfaction that must arise from such improvement, are obvious to all. There is but little reasoning then necessary to shew, that this amiable part of our charge had best receive tuition in seminaries appropriated to themselves. In these, their innocence and delicacy can more easily be protected; their conversation, manners, and address more perfectly attended to; and each congenial circumstance made to operate in leading them to excellence.

I am aware of the objections that have been made against public seminaries for young ladies. Vanity and vice, it is said, are apt to be introduced by some, where there is a great number, and the contagion soon spreads. Private tuition, it is alleged, is the most proper for pupils of this sex.

It is possible there may be instances to countenance this objection: yet it holds not true, indiscriminately. Indeed, when daughters are sent from home, to board—the tender guidance of a sensible mother being in a manner suspended, and the father's guardianship quite ceasing for a time—there is some room for apprehending danger, notwithstanding all the caution that can be exercised. But the seminaries which we have in our view, are less exposed to hazards of this sort. The young persons, upon our plan, are not to be thrown at a distance from the paternal eye, nor separated from a mother's sweet attentions. We deem both essential, where they can be enjoyed: and neither are superseded in the least. I suppose also these seminaries to be

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well constituted, and managed with prudence and ability.

As to private tuition, I allow it all the reasonable praise its advocates could desire. But, considering circumstances in general—and that the literary instruction of females must be conducted almost in the same way with that of boys; the private method will be often found impracticable, and very seldom competent, of itself, to the end proposed.

In few places—almost in none, till lately—hath there been any respectable institution for the express purpose of educating young ladies. There hath not been one, holding forth a system that can be thoroughly approved; or carrying into practice ideas which comport with the dignity of the object. There might be many such: and they would, in every possible view, deserve the attention and encouragement of all who wish well to the prosperity of their country;—we may say, to the felicity of the world.

Our object here is not excessive refinement, or deep erudition; but such culture, in the first instance, as no woman, whatever her condition and expectations are, can conveniently be without. And then, such farther progress as the taste and fortunes of some may require.

It is by no means necessary that every woman should have a classical education, even with respect to her own tongue; nor that any should proceed in one literary branch, or another, farther than what prudence and œconomy recommend. But, unquestionably, all, of every description, should learn to read correctly. All should be taught to write tolerably well. All should be instructed to manage common numbers, and to keep plain accounts. All should be formed to the habits of obedience, and a placid graceful attention to whatever duty they may be concerned in.

Now, in the institutions which I wish may be patronized, these essential parts at least, of female education, will become more generally understood, than they were formerly. Almost every one may rise to a degree of consideration herein, that people had scarcely any conception of before.

In such institutions, more effectually than any where else, may be acquired an accurate acquaintance with the vernacular language—its elements, orthography, idioms, and construction: the result of which will be, a copiousness—dignity—force—and beauty, in writing, as well as in conversation, which most women are certainly as capable of, as the men; but, for want of opportunity, so few of either sex attain.

Besides reading with propriety and grace, that charming accomplishment—how generally would they write a beautiful, easy hand, and gain facility in arithmetic!—How common would it be, to understand the use of the globes—the most pleasing and necessary parts of geography and history;—drawing—music—psalmody:—while many, whose genius, and situation in life, might render it advisable, would, at a proper season, make advances in the belles lettres; and others reach, with success, after the garland of philosophy.

—And all along, let the fair pupil's range in the field of learning, be either more, or less extensive—she will be taught, above all things, to have this truth in constant view, that the knowledge of her Creator is wisdom pre-eminent; and the ornaments of a meek and quiet spirit, are the first-rate accomplishments under heaven.

Now, any expostulations that might be used on account of past omissions—or the reasonings that might be adduced by onespeaking on this subject, are superseded, I trust,

in Philadelphia, by the actual establishment of an academy, such as meets our ideas, and accords with our wishes—an academy, which, from its having the countenance of so many respectable characters—I readily suppose, will enlarge its system yet farther, and spread extensively its goodly influences.

Here then I hold ; sensible that it is unnecessary in this place, to dwell longer on the consideration first intimated : or even to touch, a moment, on the other two particulars, “ the time of life most proper for education ;” and “ the manner of conducting it ;” circumstances, which the good sense of the parents, whose daughters seek instruction early within these walls—the skill of the principal, and the attention of the visitors, amply provide for, and insure in the manner that every well-informed mind would desire.

All that I have to do on these topics, is, with cordiality, to congratulate the respectable parents and guardians of these amiable young persons ; and you, worthy sir*, under whose special care they are placed, and every one who assists you in this excellent work, particularly the gentleman† to whom this city is greatly indebted, for his instructions in that delightful art, which heightens so much the beauty of social worship.

Sirs ! may the proficiency of this your happy charge, in learning, and in “ whatsoever things are lovely,” amply fulfil your wishes, and reward your pains !

“ Delightful task ! to rear the tender thought,

*To teach the fair idea how to shoot ;
To breathe th’ enlivening spirit, and to fix*

The generous purpose in the glowing breast.”

NOTES.

* *Mr. Brown.*

† *Mr. Adgate.*

And now, young ladies ! as far as you have proceeded, you have acquitted yourselves well. The smile of general approbation is yours : and the particular, well-earned, sweet regards of those with whom you are, each, more intimately connected, are yours.

We think we have indubitable proofs, in the specimens you have already given, of your abilities, and your delight in learning. A union like this promises much future excellence. You will consider duly your present advantages, and keep in constant view what is expected of you.

To rise to eminence, requires continued, as well as early, diligence.

While you frequent this seminary, let it be with a cheerful elevated endeavour to gain as much improvement as possible : and let your end in acquiring knowledge, be, that you may be eminently good, and eminently useful.

You will be amiably respectful to your instructors : peculiarly decent and friendly to one another ; perfectly inoffensive, courteous, and obliging to all. The law of kindness must dwell upon your tongues. Good will, and peace, and humbleness of mind, must every where attend you.

Thus growing in wisdom, as you grow in stature, and possessing those qualities which concentrate in worth and loveliness, you will become (what I look upon to be but very little lower than the angels) sensible, virtuous, sweet-tempered women.

But, highly esteemed daughters ! there is a consideration which I have, all along, supposed to accompany your improvements, and to shed around them glory, without which, indeed, they would all be unprofitable ; I mean, that in the light and love of God alone, your nature can be happy.

I barely subjoin a thought in rela-

tion to this ; it may give a better seasoning to the sentiments preceding.

That light and love must come to you, and to us all, thro' the Son of God. He is the great master, whose school you must especially attend. In the midst of all your studies, and in all your ways, be learning of him. He gives you redemption. He reconciles you to his Father. He teaches you to be pure, unblameable, and perfect. He will open a heaven of serenity within you ; restoring all the honours of innocence, and the rights of immortality.



New method of placing a meridian mark, in a letter to the rev. dr. Ewing, president of the university of Pennsylvania. By David Rittenhouse, esq.

Dear sir,

SOME time ago I mentioned to you a new invention I had for fixing a meridian mark for my observatory. This I have since executed, and as it answers perfectly well, I shall give you a particular description of it.

When my observatory was first erected, I placed a meridian mark to the northward, at the distance of about 1200 feet, my view to the south being too much confined by adjacent buildings, and that to the north was not distant enough to have the mark free from a sensible paralax. But last summer a new brick house was built directly north of the observatory, and much too nigh for distant vision with the transit instrument. Now, though a fixed mark is not absolutely necessary where you have a good transit instrument, the position of which may be examined and accurately corrected, if necessary, every fair day, by the passage of the

pole star above and below the pole, it is nevertheless very convenient, saves much trouble, and may sometimes prevent mistakes. We have an instance in the observations of the astronomer royal at Greenwich. His mark being taken down at repairing the building to which it was secured, the transit instrument was accidentally thrown out of its true position, and the observations with it were continued for a considerable time before the error was detected. My meridian mark being thus rendered useless, I contrived several other methods of supplying its place, all of which were, on sufficient deliberation, rejected for the following.

I fastened the object glass of a thirty-six feet telescope, firmly, to the wall which supports the transit instrument, opposite to and as near as convenient to the object glass of the transit, when brought to a horizontal situation. In the focus of the thirty-six feet object glass, I screwed fast a piece of brass to a block of marble, supported by a brick pillar built on a good foundation, for this purpose, in my garden. On this piece of brass are several black concentric circles ; the rest of the plate is silvered. The diverging rays of light which proceed from every point in these circles, after passing through the thirty-six feet glass, become parallel, and entering the transit instrument, an image of the plate and its circles is formed in the same place where the images of stars or the most distant objects are formed. The circles are, therefore, distinctly seen through the transit, and being placed in the same meridian with the centre of the thirty-six feet glass, the innermost circle, about the size of a brier o, serves for a meridian mark, to the centre whereof the cross hair of the transit, may be nicely adjusted.

This mark is in several respects preferable to one placed in the common way. It is entirely free from

parallax, which the other cannot be, unless placed at a very great distance, when glasses of great magnifying powers are used. It is not sensibly affected by the undulation of the air, which very often renders it impossible to set the transit accurately to a distant mark. And it can be illuminated at night without difficulty, should the suspicion of any accident to the transit make it necessary. But it has likewise one disadvantage.—Should the pillar, in settling, carry the mark a little to the east or west, the error will be greater in proportion to its nearness.

I am, dear sir, your humble servant,

DAVID RITTENHOUSE,

P. S. The great improvement of object glasses, by Dolland, has enabled us to apply eye glasses of so short a focus, that it is difficult to find any substance proper for the cross hairs of fixed instruments. For some years past, I have used a single filament of silk, without knowing that the same was made use of by the European astronomers, as I have lately found it is by Mr. Herschell. But this substance, though far better than wires or hairs of any kind, is still much too coarse for some observations. A single filament of silk will totally obscure a small star, and that for several seconds of time, if the star be near the pole. I have lately with no small difficulty, placed the thread of a spider in some of my instruments; it has a beautiful effect; it is not one tenth of the size of the thread of the silk-worm, and is rounder and more evenly of a thickness. I have hitherto found no inconvenience from the use of it, and believe it will be lasting, it being more than four months since I first put it in my transit telescope, and it continues fully extended, and free from knots or particles of dust.

Extract of a letter from the rev. Jeremy Belknap, containing observations on the aurora borealis.

Dover, (N. H.) March 31, 1783.

DID you ever, in observing the aurora borealis, perceive a sound? I own, I once looked on the idea as frivolous and chimerical, having heard it at first from persons whose credulity, I supposed, exceeded their judgment; but, from hearing it repeatedly, and from some others whom I thought judicious and curious, I began to entertain an opinion in favour of it. I was strengthened in this opinion about two years ago, by listening with attention to the flashing of a luminous arch, which appeared in a calm frosty night, when I thought I heard a faint rustling noise, like the brushing of silk. Last Saturday evening I had full auricular demonstration of the reality of this phenomenon. About ten o'clock the hemisphere was all in a glow; the vapours ascended from all points, and met in a central one in the zenith. All the difference between the south and north part of the heavens, was, that the vapour did not begin to ascend so near the horizon in the south as in the north. There had been a small shower, with a few thunder claps, and a bright rainbow in the afternoon; and there was a gentle western breeze in the evening, which came in flaws, with intervals of two or three minutes. In these intervals I could plainly perceive the rustling noise, which was easily distinguishable from the sound of the wind, and could not be heard till the flaw had subsided. The flashing of the vapour was extremely quick; whether accelerated by the wind I cannot say; but from that quarter where the greatest quantity of the vapour seemed to be in motion, the sound was plainest; and this, during my observation, was the eastern.

The scene lasted about half an hour, though the whole night was as light as when the moon is in the quarters.



Letter from J. Madifon, esq. to D. Rittenhouse, esq. containing experiments and observations upon what are commonly called the sweet springs, in Virginia.

THESE waters rise on the north side of a large mountain, at the foot of it, called the sweet spring mountain, in the county of Botetourt. The south side is covered with stones of an ocreous appearance. In many places iron ore may be found; but on the north, the mountain is fertile, covered with a rich mould, at least near the spring. The remarkable efficacy of these waters, in many disorders, especially, it is said, in consumptive complaints, first induced me to attempt their analysis. Such experiments as I had time and opportunity to make, I shall faithfully relate, and leave it to others, better qualified than myself, to judge of their merits.

Experiment 1. Having plunged a very sensible mercurial thermometer in the spring, it stood at 73°. The temperature of air was about 69.

2. A good hydrometer sunk one twentieth of an inch deeper in common mountain water, than in the spring.

3. Nut galls mixed with the water in a wine-glass, struck a palish brown, which shewed that there was little or no iron in it.

4. Violets mixed with the water in a wine-glass, turned it, in a short time, of a reddish colour. This was a proof that the waters contained some kind of acid.

5. Having made a solution of silver in the nitrous acid, and mixed a little of it with the water, it immediately became milky, and a white pulvurent precipitate ensued. This experiment shewed by the whiteness of the precipitate, that the waters contained nothing sulphureous, and by the pulvurency of the precipitate, that the acid contained in the waters was vitriolic.

6. A solution of lead in the nitrous acid being mixed with the water, it became somewhat milky, and a white precipitate was observed. This experiment also shews, that the waters contain an acid, most probably the vitriolic, and also that they contain calcareous earth. Soap is not readily miscible with them.

7. A solution of saccharum saturni in the nitrous acid being made, and lines marked upon paper with it, and placed over the water, the lines retained their former colour. This experiment also shews that the water contains nothing sulphureous.

8. Having poured a little of the spirit of salt into the water, after some time a coloured precipitate was observed; but as the waters did not strike a green or blue colour, it shewed that there was no copper in them.

9. A solution of vitriol of copper mixed with the water, produced a thick, green, curdly appearance, but did not become bluer. This experiment shewed that there was no vol. alkali contained in them.

10. The vitriolic acid mixed with the water, suddenly effervesced, and produced a heat which raised the thermometer from 75 to 83, by applying the bulb to the outside of the glass.

11. As the spring is continually

discharging large bubbles of air, which rising from the bottom break upon the surface of the water, I was desirous of making some experiments upon the air, in order to determine whether the acidity of the water might not be owing to it; and also to determine the nature of the air, whether fixed or not. Having, therefore, caught a quantity of the air in a decanter, I communicated a part of it to an equal bulk of pure mountain water, and after agitating them for some time, gave it to several to taste; who agreed that it had the taste of the spring water. Upon a second trial, this experiment did not succeed. I had not an opportunity of trying the nature of the air by means of chalk-water, and was prevented from prosecuting any further enquiries into the nature of these celebrated waters, by a sudden alarm, to which the frontiers were then continually exposed.

These waters have been falsely called sweet; for their taste is evidently acidulous. The experiments also shew that they contain an acid. Their taste resembles exactly that of waters artificially impregnated with fixed air, extricated from chalk, by means of the vitriolic acid, and I conceive must be nearly the same with the true Pyrmont water. They have little or no smell, do not form any incrustation, nor do they leave a deposit upon standing many hours. Upon bathing in the morning, the skin has a soapy kind of feel. This was not observed in the evening.

There is, near this spring, another, a very strong chalybeate.

I am, with great regard, yours,

J. MADISON.

On musical pretenders.

To the editor.

*Timotheus, with his breathing flute or
sounding lyre,
Could swell the soul to rage, or kindle
soft desire.*

Sir,

I WAS led the other day by a friend to a concert of music, in expectation of being enraptured, as he was pleased to call it, by the performance of many excellent masters. I am indeed a lover of music, but unhappily no connoisseur; I imagined I should be entertained with some of the works of Corelli, Handel, Geminiani, or the like; but alas, sir, after a good old overture which I thought tolerably well performed, when my expectations were raised very high, up starts Signor Sombodini (a name Italianized, which I do not remember) to play a solo on the violoncello, which used to be known by the name of a bass-fiddle not half a century ago: he had indeed one part of Timotheus's skill;—he did not a little enrage many besides me, by producing some of his own composition, which, after Handel's, was nearly similar to a low farce after a fine tragedy; his performance, which a fat gentlewoman, who sat next to me, told me, I should call his *execution*, was very good; but I never knew, till some of the connoisseurs informed me, that music was only intended for vile scrapers to make minced meat of—to shew—what? why truly, their *execution*:—I had almost said, would they were all *executed*, connoisseurs and all. In the name of wonder, have we not solos of Corelli, Geminiani, and many other great masters, that every fidler must be perking his own wretched compositions in our face? A gentleman was observing, that on all bass instruments the movements ought to be slow and solemn, and that they ne-

ver were intended for jigs, &c. to which a personage of a very formal aspect made answer, in a kind of German English, "Sir, you know very little about the matter; that might be the case in Corelli's time, but now we have learned better things: in his time it was thought wonderful if a performer on the violin could reach E in alt (I think that was the expression) but now we make nothing of going close up to the bridge." I did not doubt but the person must be a very great performer, who knew so much better than Corelli, and being told that he was immediately to give a specimen, I was all expectation; when behold mynheer mounted the rostrum, or what else you please to call it, and indeed he did get up to the bridge, as he had promised: but (would you believe it?) he could not find the way down again, till during a great applause, raised by some of his admirers, he wisely threw himself down head-long; and upon my word I wished he had broke his neck—I mean musically, not mischievously—for he only intended to shew his own execution.

I always understood, till lately, that music, I mean composition, was a very difficult affair; but was greatly surprised to find, that every spark that has just learned the gamut on the fiddle or German flute, composes his own solos, trios, &c. &c. with the greatest facility; and I do not doubt can get up to the bridge much better than Corelli ever could, and come down again, like mynheer, in a masterly manner.

I am, sir,

yours, &c.

TIMOTHY PHRAM.

Philadelphia, May 6, 1787.

An address of his excellency governor Trumbull, to the general assembly and the freemen of the state of Connecticut, with the resolution of the legislature, in consequence thereof.

To the honourable the council and house of representatives, in general court assembled, October 1783.

Gentlemen,

A Few days will bring me to the anniversary of my birth; seventy three years of my life will then be completed; and next May, fifty one years will have passed, since I was first honoured with the confidence of the people in a public character. During this period, in different capacities, it has been my lot to be called to public service, almost without interruption. Fourteen years I have had the honour to fill the chief seat of government. With what carefulness, with what zeal and attention to your welfare, I have discharged the duties of my several stations, some few of you, of equal age with myself, can witness for me from the beginning. During the last period, none of you are ignorant of the manner in which my public life has been occupied!—the watchful cares and solitudes of an eight years distressing and unusual war, have also fallen to my share, and have employed many anxious moments of my latest time; which have been chearfully devoted to the welfare of my country. Happy am I to find, that all these cares, anxieties, and solitudes are amply compensated by the noble prospect which now opens to my fellow citizens, of a happy establishment (if we are but wise to improve the precious opportunity) in peace, tranquility, and national independence. With sincere and lively gratitude to Almighty God, our great protector and deliverer, and with most hearty con-

gratulations to all our citizens, I felicitate you, gentlemen, the other freemen, and all the good people of the state, in this glorious prospect.

Impressed with these sentiments of gratitude and felicitation—reviewing the long course of years, in which, through various events, I have had the pleasure to serve the state—contemplating, with pleasing wonder and satisfaction, at the close of an arduous contest, the noble and enlarged scenes, which now present themselves to my country's view—and reflecting, at the same time, on my advanced stage of life—a life, worn out almost in the constant duties of office, I think it my duty to retire from the busy concerns of public affairs: that at the evening of my days, I may sweeten their decline, by devoting myself with less avocation, and more attention, to the duties of religion, the service of my God, and preparation for a future and happier state of existence—in which pleasing employment, I shall not cease to remember my country, and to make it my ardent prayer, that heaven will not fail to bless her with its choicest favours.

At this auspicious moment, therefore, of my country's happiness—when she has just reached the goal of her wishes, and obtained the object, for which she has so long contended, and so nobly struggled, I have to request the favour from you, gentlemen, and through you, from all the freemen of the state, that after May next, I may be excused from any further service in public life, and that, from this time, I may be no longer considered as an object of your suffrages for any public employment in the state. The reasonableness of my request, I am persuaded, will be questioned by no one. The length of time I have devoted to their service, with my declining state of vigour and activity, will, I please myself, form for me, a sufficient and

unfailing excuse with my fellow citizens.

At this parting address, you will suffer me, gentlemen, to thank you, and all the worthy members of preceding assemblies, with whom I have had the honour to act, for all that assistance, council, aid, and support, which I have ever experienced during my administration in government; and in the warmth of gratitude, to assure you, that, till my latest moments, all your kindness to me shall be remembered:—and that my constant prayer shall be employed with heaven, to invoke the divine guidance and direction in your future councils and government.

Age and experience dictate to me—and the zeal with which I have been known to serve the public through a long course of years, will, I trust, recommend to the attention of the people, some few thoughts which I shall offer to their consideration on this occasion, as my last advisory legacy.

I would in the first place, intreat my countrymen, as they value their own internal welfare and the good of posterity, that they maintain inviolate, by a strict adherence to its original principles, the happy constitution under which we have so long subsisted as a corporation; that for the purposes of national happiness and glory, they will support and strengthen the federal union by every constitutional means in their power. The existence of a congress, vested with powers competent to the great national purposes for which that body was instituted, is essential to our national security, establishment and independence. Whether congress is already vested with such powers, is a question, worthy, in my opinion, of the most serious, candid and dispassionate consideration of this legislature, and those of all the other confederated states. For my own part, I do not hesitate to pronounce, that in

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my opinion, that body is not possessed of those powers which are fully adequate to the purposes of our general sovereignty; nor competent to that energy and exertion of government, which are absolutely necessary to the management and direction of the general weal; or the fulfilment of our own expectations. This defect in our federal constitution, I have already lamented as the cause of many inconveniencies which we have experienced; and unless wisely remedied, will, I foresee, be productive of evils, disastrous, if not fatal, to our future union and confederation. In my idea, a congress invested with full and sufficient authorities, is as absolutely necessary for the great purposes of our confederated union, as your legislature is for the support of internal order, regulation and government, in the state. Both bodies should be entrusted with powers fully sufficient to answer the design of their several institutions. Their powers should be distinct; they should be clearly defined, ascertained and understood. They should be carefully adhered to; they should be watched over with a wakeful and distinguishing attention of the people. But this watchfulness is far different from that excess of jealousy, which, from a mistaken fear of abuse, withholds the necessary powers, and denies the means which are essential to the end expected. Just as ridiculous is this latter disposition, as would be the practice of a farmer, who should deprive his labouring man of the tools necessary for his business, lest he should hurt himself, or injure his employer, and yet expects his work to be accomplished. This kind of excessive jealousy is, in my view, too prevalent at this day; and will, I fear, if not abated, prove a principal means of preventing the enjoyment of our national independence and glory, in that extent and perfection, which the aspect of our

affairs (were we to be wise) so pleasingly promises to us. My countrymen! suffer me to ask, who are objects of this jealousy? who, my fellow citizens, are the men we have to fear? not strangers, who have no connection with our welfare?—no!—they are the men of our own choice, from among ourselves;—a choice (if we are faithful to ourselves) dictated by the most perfect freedom of election; and that election repeated as often as you can wish, or is consistent with the good of the people. They are our brethren—acting for themselves as well as for us—and sharers with us in all the general burdens and benefits. They are men, who from interest, affection and every social tie, have the same attachment to our constitution and government as ourselves:—why, therefore, should we fear them, with this unreasonable jealousy?—In our present temper of mind, are we not rather to fear ourselves? to fear the propriety of our own elections? or rather to fear, that from this excess of jealousy and mistrust, each one, cautious of his neighbour's love of power, and fearing lest if he be trusted, he would misuse it, we shall lose all confidence and government, and every thing tend to anarchy and confusion? from whose horrid womb, should we plunge into it, will spring a government, that may justly make us all to tremble.

I would also beg, that, for the support of national faith and honour, as well as domestic tranquility, they would pay the strictest attention to all the sacred rules of justice and equity, by a faithful observance and fulfilment of all public as well as private engagements. Public expences are unavoidable;—and those of the late war, although they fall short of what might have been expected, when compared with the magnitude of the object for which we have con-

tended, the length of the contest, with our unprepared situation and peculiarity of circumstances, yet could not fail to be great ;—but great as they may appear to be, when, for the defence of our invaluable rights and liberties, the support of our government, and our national existence, they have been incurred and allowed by those to whom, by your own choice, you have delegated the power, and assigned the duty, of watching over the common weal, and guarding your interests, their public engagements are as binding on the people, as your own private contracts ; and are to be discharged with the same good faith and punctuality.

I most earnestly request my fellow citizens, that they revere and practice virtue in all its lovely forms :—this being the surest and best establishment of national as well as private felicity and prosperity. That, dismissing as well all local and confined prejudices, as unreasonable and excessive jealousies and suspicions, they study peace and harmony with each other, and with the several parts of the confederated republic—That they pay an orderly and respectful regard to the laws and regulations of government ; and that, making a judicious use of that freedom and frequency of election, which is the great security and palladium of their rights, they will place confidence in their public officers, and submit their public concerns, with cheerfulness and readiness, to the decisions and determinations of congress and their own legislature : whose collected and united wisdom, the people will find to be a much more sure dependance, than the uncertain voice of popular clamour, which, most frequently, is excited and blown about by the artful and designing part of the community, to effect particular, and, often times, sinister purposes. At such times, the

steady good sense of the virtuous public, wisely exercised in a judicious choice of their representatives, and a punctual observance of their collected counsels, is the surest guide to national interest, happiness and security.

Finally, my fellow citizens ! I exhort you to love one another ; let each one study the good of his neighbour and of the community, as his own :—hate strifes, contentions, jealousies, envy, avarice and every evil work, and ground yourselves in this faithful and sure axiom, that virtue exalteth a nation, but that sin and evil workings are the destruction of a people.

I commend you, gentlemen, and the good people of the state, with earnestness and ardour, to the blessing and protection, the counsel and direction of the great counsellor and director ; whose wisdom and power is sufficient to establish you as a great and happy people :—and wishing you the favour of this divine benediction, in my public character—I bid you a long—a happy adieu.

I am, gentlemen,
your most obedient
humble servant,
JONATHAN TRUMBULL.

A true copy, examined by
GEORGE WYLLYS, secretary.

At a general assembly of the governor and company of the state of Connecticut, in America, held at New-haven, on the second Thursday of October, A. D. 1783.

WHEREAS his excellency Jonathan Trumbull, esquire, governor and commander in chief in and over the state of Connecticut, has signified in an address to the general assembly, to be communicated to their constituents, his desire that he might not, considering his advanced age, be considered by the

freemen of this state, as an object of their choice, at the next general election, as the governor has declared his wish to retire, after the expiration of his present appointment, from the cares and business of government.

Resolved by this assembly, that they consider it as their duty in behalf of their constituents, to express, in terms of the most sincere gratitude, their highest respect for his excellency governor Trumbull, for the great and eminent services which he has rendered this state during his long and prosperous administration: more especially for that display of wisdom, justice, fortitude, and magnanimity, joined with the most unremitting attention and perseverance which he has manifested during the late successful, though distressing, war, which must place the chief magistrate of this state in the rank of those great and worthy patriots, who have eminently distinguished themselves as the defenders of the rights of mankind.

And that this assembly consider it as a most gracious dispensation of divine providence, that a life of so much usefulness has been prolonged to such an advanced age, with an unimpaired vigour and activity of mind.

But if the freemen of this state shall think proper to comply with his excellency's request, it will be the wish of this assembly, that his successor in office may possess those eminent public and private virtues, which give so much lustre to the character of him who has, in the most honourable manner, so long presided over this state.

It is further resolved, that the secretary present to governor Trumbull, an authenticated copy of this act, as a testimonial of the respect and esteem of the legislature of this state. And the secretary is further directed, that as soon as he shall be furnished with such copy, he cause

the same to be printed, together with this act.

A true copy, examined by

GEORGE WYLLYS, sec'y.



Observations on a comet lately discovered; communicated to the American philosophical Society—By David Rittenhouse, Esq.

ON the 21st of January last, John Lukens, esq. informed me that he had discovered a comet, the preceding evening: and, on the evening of the same day, assisted by Mr. Lukens and Mr. Prior, I observed the apparent place of the comet to be in the 15th degree of Pisces, with $16^{\circ} 6'$ south latitude. By subsequent observations, I found its motion to be north easterly, with respect to the ecliptic, and that its nearest approach to us had preceded our first observation. It passed the ecliptic on the 31st, in the 25° of Pisces, and February the 17th it was in Pisces 29° with $13^{\circ} 10'$ north latitude. This was the last time I saw it, clouds and moonlight having since prevented.

The light of this comet was so very faint that it was impossible to observe it with accuracy, at least without better instruments than I am possessed of, especially as the comet was always involved in day light, moonlight, or the thick atmosphere of the horizon. No pains or attention however were wanting, and from the best observation I could make, I find it passed its perihelion about the 20th of January, its distance from the sun being about $\frac{7}{10}$ of the sun's distance from us. The place of its ascending node is in the 25th degree of Taurus, and the inclination of its orbit 53° . Its motion is retrograde, that is,

contrary to the order of the signs. I have still hopes of seeing it in the morning, though its distance is now so very great that it can scarcely be visible to the naked eye.

March, 1784.



Some account of a motly coloured, or pye negro girl and mulatto boy, exhibited before the American philosophical society, in the month of May, 1784, for their examination: by dr. John Morgan: from the history given of them by their owner, mons. le Vallois, dentist of the king of France, at Guadeloupe in the West Indies, as follows.

ADELAIDE, the little girl now before the society, is aged two years and a little more than one month, is of a clear black colour, verging to brown, except that she has a white spot bearing some resemblance to an aigrette; the point of which is at the root of the nose, and it rises into the hair, above the forehead, of which it occupies above an inch in width, from the margin to the fontanelle. In this part the colour of the hair is white, and it is curly like the hair of negroes in general, and thicker in that part than on any other part of its head. In the middle of its forehead and on the aigrette, is a large black spot; on the external side next to the temples, about one half of each eye-lid, both upper and under, is black, and the remaining half next to the nose, is white.

The eyes are black and lively; a little to the left and towards the middle of the chin a white spot begins, which is long in proportion to its breadth, but of less magnitude than that of the forehead: it stretches under the chin to the upper part of the throat. The neck, the upper

and under part of the chest, the shoulders, the back, loins, and buttocks to the junction with the thighs, and the pudendum, are of the colour of her face, but the loins and the thicker part of the buttocks are of a deeper black.

The arms from the upper and middle part are white, and interspersed with black spots. There are some smaller and more numerous about her knees than elsewhere.

Upon the large black spots there are also many smaller and blacker, which are very glaring. Many of these spots divide into four, five, and six rays, resembling a star, which are not observed but by a close inspection, and then they are very visible. In several parts, those spots, being of different shades, give an exact picture of lunar eclipses, as they are commonly represented in the books of astronomy. The hands, the middle part of the fore arms, the inferior and middle parts of the legs and feet are black, which have a pretty striking resemblance to gloves and to buskins.

The white that prevails over the breast, and over the belly, arms, and thighs, has a lively appearance. The skin is soft, smooth, and sleek.

Adelaide has fine features; we meet with few negroes of so beautiful a form. In her temper she is chearful, gay, and sportful, and as tall as children of her age generally are, and hath evidently a very delicate temperament, yet enjoys pretty good health; neither hath she eyes, nor ears, nor any particularity in her features, or external conformation, like what may be seen at the first inspection in those who are called white negroes, whose skin is altogether of a dead white colour, and whose woolly white hair and features resemble those of their negro parents.

From this detail we may remark, that the alteration of the natural colour of Adelaide, takes place over

the same parts of the body, for the most part, as over the body of Maria Sabina, of whom *monf. Buffon* gives an account; and considering it as a well authenticated fact, from all the information that has been received of *Adelaide*, that she had a negro father and negro mother, we are led to believe that the English account under the portrait of Maria Sabina is exact, and not asserted merely for the sake of covering the honour of the mother, and of the society in which she was a slave.

The pyed mulatto boy is named *Jean Pierre*. He is a month younger than *Adelaide*; but from his figure, which is robust, he appears to be six months older. He, as well as *Adelaide*, both belong to *monf. le Vallois*. He was born at *Grandterre*, *Guadaloupe*, of a negro wench named *Carolina*, and of a white man, an European, whose name I did not learn.

A certificate which *monf. le Vallois* has with him, legally authenticated by *monf. Blin*, lieutenant judge, given from under the hand of *monf. des Effart*, king's physician, and *monf. Cumin*, king's surgeon, at *Grandterre*, *Guadaloupe*, attests, that *Adelaide* was born at *Gros Îlet*, in *St. Lucia*; that *Bridget*, her mother, is a negro of the *Ibo* nation, and now reckoned to be about twenty five years old, and that her father, whose name is *Raphael*, is a negro of the *Mina* nation. In this certificate it is further declared, that the father of *Jean Pierre* has white spots (that is, of a deeper white than his natural skin) of the same shape, and in the same parts of the body as the son, and that the mother and one of the brothers of this boy's European father have like white spots, and in the same parts of the body.

However it may be in respect to those observations concerning the supposed resemblance of the white spots they may bear about them, to those

which mark *Jean Pierre*, it suffices to take notice here, that his body is entirely of the colour of a mulatto, except that he has from nature a white aigrette in his forehead like that of *Adelaide*. The hair in that part is white mixed with black, which is not so in *Adelaide*. The stomach, and the legs from two inches above the ancles to the middle of the calf of the legs, are entirely of a beautiful lively white; there is also a white spot in the upper part of the penis. Over the white parts of the legs there is a light white down, longer and thicker than children commonly have at this age.

Such is the natural history of those two extraordinary children; but what causes have produced those surprising phenomena and alteration of the natural colour of their skin, are left for others to investigate and explain.

Monf. le Vallois relates that the mother of *Adelaide*, whilst pregnant with her, was delighted in lying out all night in the open air, and contemplating the stars and planets, and that the great grandmother of *Jean Pierre* (a white lady) during the time of her being with child of her daughter, his grandmother, by the father's side, was frightened on having some milk spilled upon her. Whether this will account for her daughter and grandchildren being marked in the manner related, and for the spots observed on the mulatto boy descending to him—or whether the strong impression made upon the mother of *Adelaide*, by the nightly view of the stars and planetary system, may be considered as the cause of the very extraordinary appearances in that girl, every one will determine for themselves; there being many who dispute children's being ever marked by the fears, longings, or impressions made by mothers on the bodies of their children, at a certain time of pregnancy; for which they endeavour

to account in different ways ; whilst others, who have known a variety of children born with different marks on them (which have fallen under their particular notice) are equally confident of those marks proceeding from the causes alleged.



Letter from the hon. Benjamin Lincoln, esq. F. A. A. to the honourable James Warren, esq. F. A. A. relating to the ingrafting of fruit trees, and the growth of vegetables.

Hingham, Nov. 3, 1780.

My dear sir,

I TAKE this early opportunity, agreeable to my promise, to enclose you the sentiments of my friend on grafting, the growth of plants, trees, &c. These were given on a conversation which arose on my mentioning, that I had observed, for a number of years, an apple tree in my orchard, the natural fruit of which was early, having been grafted with a winter cyon, producing fruit very like in appearance to the fruit produced by the tree whence the cyon was taken, but destitute of those qualities inherent in that fruit, and necessary to its keeping through the winter. This led me to call in question the propriety of grafting winter fruit on a summer stock, and to enquire whether the stock through which, I supposed, the food passed to the cyon, and by which it was fitted properly to nourish the helpless and newly adopted branch, would not rather assimilate that, than that the cyon could, thus fed, retain all the qualities of its parent stock.

I am sensible, that there are objections to this new system ; and, perhaps, difficulties may be raised to it, which cannot be obviated. But, as this may arise either from the errone-

ousness of the doctrine itself, or from the want of knowledge in the principles of vegetation, I think it should not be adopted or rejected without the fullest enquiry ; and especially, since a knowledge of the laws of vegetation is one of the most interesting matters which can be the subject of discussion : for on vegetation depends our being ; and in the same proportion as we obtain a knowledge thereof, and practice on that knowledge, in that proportion is our well-being promoted. That cultivation promotes vegetation, I think none will deny : for surely the earth, spontaneously, gives us but a bare subsistence. The reasons assigned, why the earth did not more early bear fruit, were, because there was no rain on the earth, and because there was no man to till the ground. The necessity of which seems to have produced one of the first decrees from heaven to man, even while he was in Eden, surrounded with all the blessings thereof, that he should dress the garden. Whether tilling and dressing the earth so prepares its parts that they become proper food for the plant, and thereby promote vegetation—whether by tilling and dressing, the land is fitted properly to receive the rays of the sun, and to receive and retain a suitable quantity of water, with which food for the plant is supposed, by some, to fall—or whether, by tilling and dressing, the land does really partake of more particles necessary to vegetation, and so attracts like particles floating in the air, as similar bodies attract each other, and so light on, and feed the plant in their fall, or do rest on the earth, are absorbed by the roots, and thence conveyed through the whole plant, are questions which can, I think, be determined with greater certainty when the principles of vegetation are fully ascertained.

Please to favour me with the result of your enquiries on these matters,

and it will much oblige him who has the honour to be, &c.

B. LINCOLN.

Hon. gen. Warren.

Observations on the growth of trees downwards after the first year.

THE idea has universally obtained, that trees grow from the root upwards. But perhaps it may appear probable, from the following considerations, that trees, from the first year, grow from the top downwards.

The growth of the annual plants seems to be the mere expanding of the parts contained in the seed, or bulb, which is a more perfect or full grown seed, differing but little from what is commonly called seed. Of this, the bulb of a tulip is the best example, as the parts are visible without the help of glasses. Upon removing the several coats of the bulb, each of which are the support of a leaf, in the centre of it, a large flower, near half an inch in length, will be found, and, in thickness, as large as a rye-straw; in which the petals, stile, filaments, and buttons are fully formed, and perfect in every respect but size and colour. The lower leaf of the plant, which, within the bulb, covers all the rest, swells and expands first: then the next above swells and expands; and so on until the whole are expanded: after which, the stalk arises, the flower swells and opens, and its beautiful colours are separated and exhibited to the eye. In this growth, the bulb is entirely wasted, except only the fine skin that covered each squamina, which remains much thinner than white paper. In the centre of the bulb, below the leaves, and adhering to the stalk, may be seen a very small bulb, much less than the seeds of the plant. This bulb is, however, increased with the growth of the leaves, until it becomes of the

size of the parent: and when the stalk, the leaves, and the fibrous roots decay and dry up, this new bulb remains, in the place of the old one, capable of a like growth the next year.

The first year's growth of a tree, like that of plants, is the mere expansion of the parts contained within the seed, so far as those parts are fitted for growth; and being expanded, the wood formed has no further growth, in any direction, but remains of the same size until it decays. Each leaf, which grows on the first year's shoot, as well as those of succeeding years, has annexed to it, immediately above its stem, an embryo bud, which is nourished and fitted to grow the following year, and to become a branch of the future tree. The leaf having performed its maternal duty, falls to the ground, and manures the tree from whence it fell.

The wood of these saplings of a year, is uniformly of one texture; but the wood of the next year is separated from it by a circular line, which remains as long as the wood lasts. Every succeeding year, is distinguished in the same manner; so that by cutting the tree on one side, from the circumference to the centre, and counting those circles, you may ascertain its age. And one of the main questions, arising in the consideration of this subject, is, how are these annual additional circles of wood formed? Are they formed by the filling and expanding of fibres, which, too small for the observation of our senses, lie between the bark and the tree? or are they new fibres shooting either from below or from above? It appears, by examining the wounds of trees, that the wood being once separated, never heals up and grows together. The new wood grows over, and covers the wound; but the separated vessels never unite again: therefore, if the edge of a knife be

passed transversely through the bark half round a sapling, and those supposed extreme fine vessels were cut off, that side of the tree ought to cease growing, and the buds above it perish. But the fact is otherwise: for, cover the wound so as the air may be prevented from carrying off the moisture, which, when uncovered, flows from the wound, the buds above will grow nearly as well as if the wound was not made. To suppose that new vessels, formed at the root, ascend, and seeking the buds, by passing round the incision, immediately find them, is too ludicrous an objection to be seriously noticed. Let us, then, consider the buds which are formed in the bosom of every leaf.

One of those buds, rended from its parent plant, and inserted in the bark of another tree of the same genus, will grow as well as if it had been continued where nature placed it, and become a complete tree. Here, at least, there is a certainty, that there are no fibres calculated to support it, yet it will grow; and the whole tree, above the insertion in the stock, thus springing from a foster-bud, is exactly of the same nature in all respects, and produces the same fruit as the tree from which the bud was taken. This is the wonderful circumstance, which, though often attempted, has never been clearly accounted for. We shall proceed to enquire, then, how buds, inserted in foreign stocks, attain their growth.

When a bud is brought into contact with the stock, and the bark of the stock passed round and upon the bark laid in with the bud, the sap very quickly forms a gum, which glues them together, and stops the mouths of those vessels which had been torn by separating the bark and bud from the parent tree. Whoever examines the fact, must be convinced, that the bud, thus laid in, ne-

ver has any further adherence to the stock; but remains, during the life of it, liable to be separated from it by dissolving that gum; and, from this circumstance, the size and shape of the wood, or bark, laid in with the bud, may be plainly discovered many years after its insertion. Here the communication between the stock and the bud is destroyed: for, if the sap penetrated this gum, it would dissolve it, and the bud would fall off; and there can certainly no fibres be sent from the root to feed a bud, which nature had not placed there. Nothing but experiment could induce a belief, that a bud, thus situated, would grow, become a tree, blossom, and bear fruit. Let us see how buds grow in the situation assigned them by nature.

The largeness of the bud, and the freedom with which it shoots, renders the peach-tree a proper subject of this enquiry. Early in the spring, when the bud first begins to swell, we shall find one or more fibres shooting from it downward. These fibres are so large, below the bud, as apparently to swell the bark, and, on removing the bark, the fibres may be plainly seen by the naked eye. Whoever carefully examines this fact, will scarcely doubt that this is really the manner in which buds begin to grow. Inoculations having the same power of sending out fibres from themselves as buds, in their natural situations, need no nourishment from the stock on which they are fixed; but it becomes the question, from whence is their nourishment derived?

A curious yellow carnation, presented to a gentleman at Lancaster, in the year 1778, being transplanted very early in the spring, and the weather proving cold, he was obliged to take it into the house, and keep it in a room where fire was kept. Notwithstanding his utmost care in keeping the earth well watered, the plant declined, the leaves became

soft, and rested on the earth, and the plant shewed every symptom of approaching death. In this state, having bended twigs over the pot, he wet a thick tow-cloth, and threw over the plant, which formed a moist atmosphere round it. In a few hours the leaves became erect, and elastic, and within three days the whole plant assumed the aspect of perfect health. The roots had a supply of moisture, but it did not grow: the leaves were supplied, and the plant instantly flourished.

(To be continued).



Notes on farming, by the hon. C. T.

THE success of farming depends principally on the collecting manure, on a proper change of crops, and on good tillage, or ploughing the ground properly, and keeping it clean, on the choice and management of stock, and on the care of the orchard and its produce. On these several articles, I shall make some notes, which are chiefly collected from Mr. Young's farmer's tour through England, published in 1771.

1. Means for collecting manure, and management of a farm-yard.

Let the farm-yard be made tolerably large; around it let there be sheds to shelter the cattle. The yard should be level, or rather hollow in the middle, that the ooze may not run off. Into this yard throw all your straw, which is not used for bedding. But as this will not be sufficient, it will be well to mow stubble, which is cut high, and cart it into the yard. All the rubbish and weeds in the lanes, &c. which should be cut while green and before they go to seed, should likewise be carted in. But above all, rake together the leaves in the woods, which may be loaded into carts with large baskets, and carry them into the yard. These being spread over the

yard, will, by the cattle treading on them, and receiving their dung and urine all winter, be converted into as rich a manure as any in the world.

When cattle are housed, they should be bedded every night with straw or leaves up to their bellies. This contributes to their health, and increases the dung. Let their stalls be cleaned out once a week; the heat of their bodies lying on the litter for that time, will begin and promote a fermentation, by which it will be reduced to good manure. By this mean, for every horse or cow kept in the stable during the winter, you may make at least fifteen or sixteen large loads of dung. This dung should, in the spring, be carted out to a stercorary, which should be prepared in the following manner. First spread a layer of earth (the cleansing of ditches, or earth scraped up from the surface of the ground will answer for this): then throw on a thick layer of dung, and then a layer of earth, and so alternately a layer of dung and earth, but so that the quantity of earth shall not exceed one half the quantity of dung. By this means you will have twenty-three or twenty-four large loads of good manure for every beast, and this laid on in the fall will be a good dressing for an acre of land.

In making the stercorary, the carts should not drive on the heap, as this would press it too much, and prevent the fermentation, which is necessary to render it good compost. The loads may be shot down by the heap, and thrown on with shovels, &c.

Great care should be taken to preserve the urine and ooze from the yard and stercorary. For this purpose, some careful farmers sink wells, the bottoms and sides of which are well clayed. To these the ooze is conducted, and when they are full, some pump it up and throw it back upon the heap; others cart it out and

sprinkle it over the grass. This last is said to be an excellent practice.

There is another practice which turns to great account, as well for increasing the quantity of manure, as for feeding horses and cattle in the cheapest manner. Let a field of red clover be sowed near the farm-yard; in the second year after it is sown, it will be fit for cutting by the second week in May. Let your horses and cattle be then kept in the yard, and clover cut and given to them in the stable, or in racks. It has been found by experience, that seven acres of clover will feed twenty horses, seven cows, five calves, and as many pigs, for seventeen weeks. Suppose the rate of keeping to be as follows: -

20 horses, 17 weeks, at	
2s. 6d. per week,	£. 42 10 0
7 cows, 17 weeks, at	
2s. 6d. ditto,	14 17 6
5 calves and 5 pigs, at	
1s. 6d. ditto,	6 7 6
	<hr/>

The amount will be, £. 63 15 0 which is gl. 2s. 1d. per acre. Besides this, the quantity of dung is immense where there is litter at command; and this is always the case where leaves can be gathered from the woods; for cattle fed on green food, make much more urine in the summer. It has been estimated, that four or five hundred loads of good dung may be made in the time mentioned, from the above horses and cattle. This, mixed with earth as before directed, will produce upwards of six hundred loads of manure, which would be a pretty good dressing for thirty acres of land.

It is to be observed, that a careful farmer suffers nothing to go to waste; and therefore all the urine and offals from the house, and all the ordure from the necessary, are carried and thrown upon the stercorary or farm-yard.

In preparing a place for the ster-

corary, it may not be amiss first to dig out the earth about two or three feet deep. In that case the bottom should be well rammed and clayed, to prevent the ooze from sinking into the earth. The earth that is dug out, if of a loomy quality, or sandy mixed with loom, will serve to mix with the dung; so that the labour of digging the pit will not be lost.

In order to mix the earth and dung well together, the stercorary should be turned at least once in the summer. For this purpose, a small space should be left at one end; then, beginning at that end, throw an equal space of the compost from top to bottom into that empty space, and so proceed till the whole is well turned and mixed. The stercorary should be kept moist, but not too wet, for though a moderate degree of moisture promotes fermentation and putrefaction, yet too great a degree will prevent them. As our summer sun is very warm, and exhales too much of the moisture, it will be well to cover the stercorary with hurdles of leafy branches, or a thatched cover may be made over it.

2. *The change and course of crops.*

It is a common opinion and practice of this country, that land should yield a crop once in three years: this surely is bad farming, and what nothing but the great quantity of land could warrant. In England, and throughout Europe, and indeed in all the old settled countries, where land is scarce and rents high, it is absolutely necessary that a crop of some sort be raised from the ground every year. And experience has evinced that land will bear this, and that the goodness of the crop depends upon culture and manure, and a proper change of seeds. For though good land is of great importance, yet the skill and industry of the farmer, will, in a great degree, compensate for the want of goodness in the soil in its natural state: and it is found,

that by proper management, lands which are naturally poor, have been brought to yield crops nearly as great as rich lands, and much greater than rich lands ill managed. The man, therefore, to whose lot it has fallen to possess lands naturally poor, should not be discouraged, but rather stimulated to exert his abilities, and shew his skill in meliorating nature.

A succession of the same sort of crops will speedily exhaust the best land. For this reason the skilful farmer changes his crops almost every year. The succession most approved, and which is practised to great advantage in Norfolk, one of the best farming counties in England, is,

- 1 Turnips,
- 2 Barley, with cloverseed,
- 3 Clover,
- 4 Wheat.

Then turnips, &c. in succession again. Some have had the third and fourth year clover, and the fifth wheat.

Another course, which they find extremely beneficial, is,

- 1 Turnips,
- 2 Barley,
- 3 Clover, two years,
- 4 Buckwheat,
- 5 Wheat; then turnips, &c. again.

They plough four or five times for turnips, beginning in the fall. After the ploughing they leave the ground unharrowed to receive the benefit of the winter frosts. They plough it again in the spring, and having first laid on the manure, then they plough and harrow it again in May, and give it the last ploughing and harrowing in June, when the seed is sown.

Some put on their manure just before the last ploughing. With respect to this, experience will be the best director. The turnips should be sown in rows, or the seed drilled in with a drill plough. The turnips, while growing, should be hoed twice, or ploughed between the rows as is common for potatoes, and kept clear of weeds.

The crop is fed off by cattle and sheep. Some feed them off as they grow, confining the cattle and sheep by hurdles to an acre; when that is eaten up, removing the hurdles and taking in another acre, till the whole is fed off. Others pursue the following method. They first feed one piece, suppose an acre, by running a row of hurdles across the field; then, before they move the hurdles, they draw another acre, and cart them for the cattle to the acre eating off, and so on throughout the field, always carting the crop from the land where it grows, to the part last cleared. If the produce is large, and cattle are turned in, they spoil as much as they eat; but when turnips are laid clear above the soil, and the earth partly shaken off, they eat them up clean.

For barley, they commonly plough three times, but some four times; twice in the fall, leaving the last ploughing unharrowed to receive the benefit of the winter frosts; the other ploughing or ploughings they give in the winter or spring. With us, as our winters are generally severe, three, or even two ploughings, will do; one or two in the fall, and one in the spring. They sow four bushels of seed to the acre, and get from thirty-two to forty bushels in return. This seems a large quantity of seed; however, experience will shew, whether the quantity commonly sown in this country, which is usually not more than two bushels, or that sown in Norfolk, is best. And for this purpose, it will be well to try different quantities on the same field, and note the difference, and then follow that which answers best.

After the barley is sown and harrowed, they then sow the clover seed, eight or ten pounds of seed to the acre, and then roll the ground with a large wooden roller, which presses in the seeds and breaks the clods. In this country, some defer sowing the clover till the barley is off. The land

is then ploughed and well harrowed, and sown with clover seed, eight or ten pounds to the acre, and then rolled. Some recommend the sowing buckwheat, before the last harrowing, and then to sow and roll in the clover seed. The buckwheat, they observe, shelters the young clover from the sun, and keeps down weeds and other grass. But in this case the buckwheat should be sown very thin. The mowing or cutting it in the fall, will not injure the clover. Both ways may be tried.



Method of making pot-ash as practised in Hungary, and Poland.

IN Hungary and Poland, the manufacture of pot-ashes is carried on in the woods. The buildings necessary are only wooden sheds, slightly built up, and contrived so as to be taken to pieces, and carried from one forest to another.

The most proper wood is the oak, bearing acorns, of which they pick the best trees, one of which will render five kettles, or about twelve and a half bushels of pot ashes, the quantity requisite for making 100 wt. They find a very great difference in the nature of the wood in different forests, that of Tjagadoru and Canissa yielding double the quantity of lixivious salt that can be had out of the wood of the forests near Epire, under the Carpathian mountains. Too much attention cannot be had to the choice of proper wood, though to some people its importance may not appear at first view.

When the wood is felled, and cut into billets, it is burnt in a large hearth, under shade, to prevent the rain from spoiling the ashes, which must be kept dry, three, four, or six

months, before they are lixivated; for experience shews, that they produce more salts, when kept a certain time, than when immediately used. Care must be taken to keep them free from dirt.

To lixivate, or draw the salts out of the ashes, they use a number of casks, not unlike French hogheads, according to the extent and largeness of their works. The casks are about two feet ten inches high: they have a double bottom, the uppermost of which is placed ten inches above the lowermost; it is perforated with holes, and the lowermost has one hole for the lie to drop gently through into a trough: the space between the two bottoms is filled with straw; twelve or sixteen of these casks being ranged in a row upon a trough, are filled with ashes, and by means of a canal or gutter laid upon the casks with a hole corresponding to each of them, water is conveyed into them from a pump: this water passing through the ashes, carries their salts along with it; as long as it is of a brownish or reddish colour they let it run through; but when no longer discoloured, they stop. The lie thus procured not being strong enough by passing through the ashes once, must be poured upon a second or third cask, till it is so strong that an egg will swim in it; however it must be observed, that there is a danger in making it too strong.

When the lie is thus procured, they proceed to evaporate the watry particles from it by ebullition; this they call making black pot-ashes. For this purpose they use iron pans, much like those used in making salt: they are about four feet diameter above, and near three feet deep; between a pair of them they have a brass boiler, somewhat smaller than the iron pots; they are fixed in masonry like a sugar baker's row of pans with a fire-place below them, and an open chimney

to carry off the steam. They use, according to the largeness of the works, three, six, nine, or twelve pans and boilers, in a work. Suppose they work only two iron pots and a brass boiler, they begin by filling one pan and the boiler with lie, and then making fire: in proportion as the lie evaporates and diminishes in the iron pan, it is supplied from the brass boiler, which is supplied with cold lie. When the first pot is boiled ten or eleven hours, they fill the second, and supply it continually from the boiler in the same manner as the first was: the first pan is still supplied with boiling lie from the boiler 'till the phlegm is entirely evaporated: they then stop putting lie to it: but, continuing the fire, the mass becomes thick and hard, and is what is called black pot-ashes. When it is cold, it is cut into pieces and taken out, and fresh lie is put into the pan, and the operation continued as mentioned above. When the first pan is evaporated, the second is only half evaporated; so the work is never discontinued during a week, in which time two men, relieving one another, make about seventeen hundred weight.

The process of calcining the black pot-ashes, rendering them of a fine whitish blue colour, and able to stand the weather without running into a liquid, is performed in an oblong kind of a furnace, in the midst of which there is a hearth somewhat raised with a border of bricks to prevent the pot-ashes from falling into the fire during calcination. The fire is made on each side of the hearth: there is a door to the hearth, through which the black pot-ashes are put into the furnace, and a door on each side of it to put in wood to the fire: the furnace is arched over, and there are three holes in the front part, to give vent to the smoke and vapours.

The proportion is as follows: The length of the furnace fifteen feet; the breadth twelve and a half feet, including the hearth and fire places; viz. the hearth eight and a half feet; the two fire places four feet; the height of the arch, from the hearth, three feet, all within the walls. When a sufficient quantity of black pot-ashes are ready, they begin to calcine, and make it a rule never to let the furnace cool, till they have finished the whole. The black pot-ashes are broke into lumps the size of a man's fist, and spread upon the hearth, after which the iron door is shut, and a gentle fire is made, and care taken to hinder the ashes from running and vitrifying, which a strong heat would occasion. When they grow red hot, they are stirred with an iron rake that they may calcine equally: when they begin to whiten, the flames become bright, and the fire is increased to the greatest degree. When they want to know if they are enough calcined, they take a lump out, and if it is white in the inside, they are done. The door of the hearth is always kept shut, except when they are stirring the pot-ashes: and in order to observe the progress of the calcination, they have a small hole in the iron door of the hearth to look in at. When the calcination is finished, they rake out the pot-ashes upon a pavement before the furnace: they are packed up in casks of fifteen to seventeen hundred weight. When the furnace has cooled a little, they put in more pot-ashes to calcine, and by relieving the workmen, continue calcining 'till all the black pot-ashes are done. Four men and a boy, constantly employed, make about forty to forty-two tons of calcined pot-ashes in a year, all the operations included, if the work is carried on, and rightly understood.

*Thoughts on the culture of hemp.—
Published by order of the Boston
committee for promoting agriculture.*

IN the remote part of the Russian empire, the farmer doth afford his hemp at so cheap a rate, as to allow of a transportation of many hundred miles by land, to Riga, Peterburgh, Archangel, and other ports, and from thence, (after duties and other charges paid) some hundred leagues to the southern parts of Europe; and with an addition of charge, from thence, of not less than 1000 leagues, to America. This being duly considered by the American farmers, who are generally upon a much better soil, and in a much happier climate, will be a means of convincing them, that notwithstanding the supposed difference in the price of labour, they may produce hemp with profit, since it may be transported to market with a light charge, free of duty, and vendible for cash, at more than seven times the price it cost at the place of its growth in Russia. Should it be said, the Russian farmer gets but little for his labour, yet it is to be presumed the American must grow rich by his; and it is expected with good reason, that a few years experience will convince him thereof.

The most proper time for sowing the seed cannot be fixed, as not only the climate, but even the situation of the land, wherein it is to be sowed, is to be considered—whether it be high and warm land, or more low, and exposed to wet, if sowed too early: some hemp-growers in Massachusetts have, for the most part, sowed about the same time they planted their Indian corn; others are of opinion, that as early in the spring, as the ground can be got ready, is most adviseable; and this will be much earlier in some of the states than in others. Hemp is of quick

growth, and may seasonably arrive at maturity, though not sowed till the middle of May. But however the farmer may judge as to the season, let him be very cautious as to the goodness of the seed: an imposition must render fruitless the labour of the year. He is therefore to chuse such seed (of the last year's growth only) as appears fresh, firm, and bright, to be proved by rubbing it between his hands; if it suffer this without breaking, and is made much brighter, it may be called good; but if it be broken and made dusty by rubbing, it must be judged unfit for the farmer's use. Of good seed, the quantity to be used is according to the method used in sowing it. In the drill husbandry method (which the experience of some foreign countries, a few years since practised upon in Great Britain, and of late in America, has proved to be the best for raising of hemp, and therefore deserves the attention of every farmer) one bushel and an half of seed to an acre is sufficient: in the common husbandry, not less than three bushels are usually sowed; and sometimes more, according to the richness or poverty of the soil. In sowing, great care and judgment should be used, that it be not sowed too thick nor too thin; by the one, the crop will be hurt by its lodging; by the other, the bunn or straw will increase, and the hearle or coat be too thin.

The preparation of the soil in the drill way of sowing hemp-seed is the same as in the common way. The seed must be planted in double rows, with ten or twelve inches partitions, and with intervals, for the hoe-plough, from three to four feet broad, as the soil may be more or less rich; the richer the soil, the narrower may be the intervals. The seed must be planted and covered very shallow, and is not safe in general, if covered deeper than about half an inch, un-

less in very light soils, in which it may grow at one inch depth. This is recommended as the method of cultivating hemp to the greatest advantage, for it supplies the plants with fresh nourishment during their growth, and the filling the stalks, and the goodness of the coat depends much upon such supplies, which it cannot have in the common way. A plant raised in this method is often worth four plants raised in the other. If hemp produced in the common way will yield the farmer such a profit as he is satisfied with, in the drill plough method, he may expect to grow rich.



Mode of breaking steers to the draft in a few days.

LET the farmer carefully yoke his steers in a close yard or stable, and not move them till they get sufficiently accustomed to the yoke, so that they will eat their food, when yoked ; which will be in the course of a day. Let them again be yoked the second day, and a pair of gentle horses or oxen be fastened before them, in which station let them stand, until they become familiar with said horses or oxen, which will generally be effected in one day, excepting the steers should be uncommonly wild, which will occasion a second day's practice, after the same manner ; and the next day, the steers may be yoked, the horses or oxen put before them as usual, and let them be fastened to a wagon or any other carriage ; they fearing the carriage behind them, and being accustomed to the old oxen before, they will proceed forward without being whipped or bruised. By the above process the farmer will never fail of success in having good working oxen.

A F A R M E R.

November 13, 1787.

Method of making steel.

STEEL may be made by fusion or cementation ; for the latter way, choose the best forged iron, or that which is most malleable, and impregnate it with a large portion of inflammable matter. First forge your iron into small bars ; then take one part of powdered charcoal, and half a part of wood ashes, and mix them together ; or take two parts of charcoal, moderately powdered, one part of bones, horns, hair, or skins of animals, burnt in a close kettle to blackness, powder them with half as much wood ashes in weight, and mix them together ; then let a cylindrical vessel be constructed with fire brick, like a very large crucible, and place the bars of iron therein, in a perpendicular position ; first having strewed the bottom over with the cementing materials an inch thick ; then let the bars be placed an inch apart, and an inch from the sides of the crucible ; fill up the interstices with the cementing mixture, two inches above the ends of the bars of iron ; then cover the crucible with a lid that will stand fire, and lute it on with clay and sand ; then kindle up a smart fire, and keep the crucible red hot for eight or ten hours. This will convert the iron into steel.

To temper the steel, give it a red hot heat, then plunge it suddenly into clean cold water. This changes the quality of the steel in an instant, from being a very ductile and soft, into a hard and stiff substance, so that the file will not cut it. The hotter the steel, and the colder the water into which the steel is plunged, the harder the steel will be. The same steel that has just been tempered, may be untempered by heating it, and letting it cool moderately.

Various mixtures are used for tempering steel, such as suet, oil, urine, water impregnated with soot, with sal ammoniac, and other salts.

Steel may be turned into iron by cementing it with calcareous earths, and quick-lime.



A recipe for an insolvent debtor.

THE man who wishes to obtain this honourable redemption from the troublesome obligations of law and conscience, in conformity to the ruling spirit of the day, would do well in the first instance, to take safe counsel on the subject. It is not necessary, I presume, to go to gentlemen learned in the law. He had better go to some of his experienced neighbours—they can teach him better than science can, the complicated struggles of grace and nature, which colour the history of the business, and especially the several processes which are requisite in the working of this political salvation. He must then cast about to see how he can most safely dispose of his lands and chattles. His family are the fittest, and the most natural objects of his gifts. He can besides have more confidence in them than in strangers, that after the transactions are over, they will return what he has given them—a small and perhaps the most miserable remnant of his estate, I would advise him to reserve for his creditors. It will at least save appearances; and appearances (even those which are pretty thin too) are all that are required by the fashionable habits of the times. He must then contract large debts to his family, revive old continental transactions, and give generous bonds for the payment of the immense sums which his sons and daughters or parents and kinsmen had lent him in the days of his prosperity. If unluckily he has no such connexions, he must then hunt up neighbours and strangers on whom he can bestow his obligations; I would advise him

to be very careful that his new contracts exceed three fourths of all his former, and for fear that his memory may not serve him with accuracy, he had better err on the safe side, and extend his new contracts beyond all possible bounds of mistake. It is a good maxim to do business thoroughly, when we undertake it, and though some patriots are for dying in the last ditch, it is certainly better not to perish at all. The most material point remains, and that is the swearing part of the business. It ought therefore to be the great object and study of the insolvent. He must keep his conscience in perfect subordination, or he will assuredly fail. He should read the compositions of the jesuits, he should court the intoxication and pleasure, he should summon up the magnanimity of a sinner, and by such wholesome ways and means, endeavour to stifle and subdue the last gasp and struggles of mortal sensation.

The swearing part of the comedy I trust will therefore be found on experiment to be the easiest of the whole. If a man gives all his property away, he then can safely swear he has none; and that his inventory is just. If he gives a well drawn bond to another, that man can as safely swear that he has owing to him a bona fide debt. It is owing according to the forms of the law, and the bond, it is clear, was bona fide given for the purpose it was intended; he may further consider that even an oath is nothing in our days, but the form of law, whatever it might have been in the days of our superstitious ancestors, or whatever it might have been in the days of the old pagan Romans, who were weak enough to cultivate a reverence for an oath, as the surest pledge of civil obedience and of military discipline.

The legislatures of our wiser days have multiplied oaths till they have destroyed their efficacy, and have in

fact only required a certain set of words to be uttered before a certain magistrate, in order to make valid a certain species of bargains. These bargains we all know are intended to keep property in families, and prevent the rude interposition of creditors. If then the insolvent and his new associates comply with that form, they answer the law, and indeed their consciences too, for St. Paul inculcates obedience to the civil powers as the primary duty of the subject.

The insolvent is now by this time ripe for his discharge, and to that end he must be careful to notify the public through the channel of the newspaper, of the time and place of his discharge. He then attends and receives from the venerable hand of justice, the pardon of his past follies, deliverance from the hands of his enemies, and an open entrance into the bright prospects of peace and happiness, in the enjoyment of that property which he is to receive shortly from the unexampled generosity of his friends. If these directions are carefully attended to, and a little more time and experience added to the salutary practice, we may shortly expect to see every man able to conduct this business for himself; and, whenever he finds it convenient, to rid himself at once of all his debts as well as all the other obligations of law and gospel.



From the American Magazine.

Letter on marriage.

To the editor.

FIVE years have elapsed, since I was enrolled in the list of married men; and although very fortunate in my connection, and extremely happy, yet I flatter myself

I have reflection enough to attend to all the inconveniencies, as well as the pleasures of the married life. I am confident therefore that the following remarks do not proceed from the impulse of a blind passion, but from a dispassionate view of facts.

I shall but repeat a hackneyed observation, when I say that luxury tends to discourage early marriages; but the application of this remark to our own country, may be useful to the young of both sexes.

It has been the misfortune of the united states, that a passion for expensive living has increased faster than the means of supporting it. The people of any country should live in such a style, that they can in the ordinary course of business, support themselves in this style, and make a clear saving of profits. If men in general, cannot, with ordinary application and œconomy, maintain themselves and families in the customary style of living, and make clear profit, either the balance of trade must be much against that country, or the manners of its inhabitants too expensive. Perhaps both are true of these states. That the balance of trade is against us, is certain; and if our business will not support the customary expences of living, and leave a profit, our manners should be reduced within narrower limits. The business of every country should regulate the manners of its inhabitants: The practice of borrowing the manners of other nations, is as absurd as to transplant the orange tree into Canada.

That we are too rapid in our advances to refinement in living, is unquestionably true. We labour hard to imitate the fashions of the richest commercial nation in Europe, while our business is clogged with more embarrassments, than the trade of any free nation on earth. Our pride obliges us to load ourselves with

a thousand expensive and unnecessary articles, which serve as badges of splendid poverty.

Although I regret that this is the prevailing taste of my countrymen, I lament still more the unhappy effects of it in multiplying the number of bachelors and maids; yet I cannot justify all the fears of my male friends, who are deterred from engaging in matrimony by the difficulty of gaining a genteel subsistence. The expence of a family is considerable; but so is the expence of a single life; and notwithstanding there are many ladies, who would help to squander away the hard-earned profits of industry, yet there are many, too, who would assist in preserving them, and in accumulating an estate.

It is a just remark, that it is more difficult to keep money than to earn it: and whatever be the cause, few bachelors ever acquire the art of keeping, or œconomising the profits of their labour; and hence the vulgar remark that bachelors seldom get rich. A single man, aside of heavy expences and contingencies, must necessarily pay a thousand small sums in the course of a year, which would be saved in a family. A woman of any understanding will always contract her expences, within her husband's income, provided she knows what that income is. I have no doubt many men deceive their wives in this article, and when they fall in arrears, lay all the blame to their extravagance. Such a conduct is equally mean and criminal.

For my own part, I once indulged the same apprehensions of the expensiveness of a married life, and doubted my abilities to support it. But in the fascination of love, I ventured to try the experiment, and have yet no cause to repent of my rashness. Either I earn more money by a more diligent attention to business, or I spend less in useless amusements, or my partner is a bet-

ter œconomist, than I was when a bachelor. Whatever may be the reason, I find subsistence as easy as before; and I flatter myself have added to the sum of social felicity.

The merit of the American ladies is universally acknowledged—and all objections to matrimony, arising from an apprehension of the expence, will be removed as soon as a man is heartily in love. I recommend to all young men to be industrious, and to all of 25 years of age, to run the hazard of being as happy, as your humble servant,

PHILANDER.

New York, December 17, 1787.



Directions to conduct a newspaper dispute, according to the most approved method now in practice.

ARTICLE I.

SUPPLY yourself with all political, polemical, controversial, and hypercritical authors, and arrange them before you.

II. If you quote any of these authors, be sure to omit the sign of quotation. It will then carry all the marks of originality.

III. If you insert the sign of quotation, at the bottom of the passage quoted, write in Italics:—*according to the best of my recollection*;—and as your recollection cannot be supposed infallible, you may, with a good face, (by changing an affirmative into a negative term, and vice versa) pervert the sense of the author in favour of your argument. Thus, truth becomes a lie by prefixing the little negative *un*, and in a thousand other ways, as may easily be learned by looking into the commentaries, and miscellaneous productions of the great cis-atlantic Blackstone.

IV. Authors generally write in a train, and one argument supports an-

other like the links of a chain : now, in quotation, you may easily turn any author to your use, if you are careful to take out a link without the one which supports it, and here too, never trouble yourself with small words, for I will warrant you, no one will give himself the pain to follow you to the passage quoted.

V. If your piece is of a public nature, interesting to each sex, and every denomination, place at the top a long frontispiece in Latin ; but be sure not to translate it, for as it stands, there are many hidden truths in it.

VI. Surcharge your piece well with the names of Coke, Sydney, Locke, Hale, and Blackstone ; talk of Lycurgus, Solon, and Draco, as though you had been their contemporaries : let all your comparisons, similes and allegories be sublime, and on an extensive scale. Comparisons from the planetary and philosophical world, when applied to common life, have a most happy elucidation ; they not only discover your learning, but are best suited to vulgar capacity ; for those who cannot understand, will adore the incomprehensibility of your genius.

VII. If you find yourself growing obscure, thrust in a laconic sentence from the classics ; nothing elucidates like it. At the conclusion, do not disgrace your piece with a signature in any modern language ; let it rest on a Grecian or Roman pillar ; an Aristides, Epaminondas, Lycurgus, Solon, Hortensius, Sempromius, or Brutus.

VIII. If your dispute is of a private or personal nature, throw no daggers in the dark ; it is Indianish. The innocent and unconcerned, by these means, may fall a victim to your envenomed arrows. Make no professors of private settlement ; this belongs to your antagonist ; but bring him to a public tribunal. Here the merit of your dispute will depend on

the authority of your evidence, when the dead are sometimes called forth to assert : but there are certain laws established to conduct a private dispute.

IX. Arrange your books as directed in article first. Now, as you are not to quote a whole paragraph, but a sentence here and there, let them be diffusive authors, all treatises on the passions, and above all, the newspapers ; here you will find an inexhaustible fund for slander and defamation, which you know is to pervade your whole piece.

X. Mingle in your ink three quarters gall : this being analogous to your mind, must act in concert with it, and prove a most potent ally.

XI. Read over one of the pieces of your antagonist, no matter which, for you are not to answer any, but to rail, defame, and vilify. Besides, were you to try to trace his arguments, your passions might cool, and so lose the whole life and support of your piece.

XII. Above, in capitals, place your antagonist's name ; at the beginning of every sentence, turn your eye upon it ; this will suggest proper ideas, and rancour will flow through the whole.

XIII. After you have finished your piece, and found it the dictates of passion, slander, and revenge, you will feel pleasing emotions, and then you may venture to write your introduction. In this assert, that the lies and misrepresentations of your antagonist, have moved you to be impartial, and perhaps rigidly severe. If you have ever discovered any marks of benevolence, generosity, or public spirit, do not forget to mention them ; they will prepare your readers to swallow the whole gorge, and keep it down till they have read your antagonist.

October 8, 1787.

Some account of the op^ossum.

THE human mind, pleased with contemplating the various operations and phenomena of nature that perpetually surround us, is often at a loss on which to fix its attention. The animal world opens an immense avenue to real information and speculative enquiry, not only with respect to the structure and œconomy that generally prevails, but the diversity we observe in particular species.

Nothing has more especially engaged the attention of the learned, than the peculiarities of the op^ossum. The anatomy of this animal is not only generally unknown in a country of which it is a native, but very chimerical ideas have been formed, respecting the adhesion of the fœtus in a very early state to the mammæ. Many, from superficial inspection, have been induced to believe the usual generative organs in this species are either deficient, or, what is more absurd, entirely unnecessary : but from dissection we find that nature has been uncommonly provident in this instance. There are a double set of ovaria, two uteri and vaginæ : and the appearance that deceives, is, that the time of gestation in this animal is not sufficiently long to exclude the young in as perfect a state as many others, so that a provision is made for their future increment, and greater state of perfection after their exclusion, by an adhesion to the mammæ : nor is this the only security they have ; when they are large enough to leave their first habitation, they are defended from danger by a false sack, supported by a bone wisely contrived to facilitate the different motions necessary for the reception and exit of the young.

Petersburgh, Dec. 13, 1787.

Extract of a letter from Cadwallader Colden, esq. to dr. Fothergill, concerning the throat distemper.

Coldenham, (N. York,) Oct. 1, 1753.

Sir,

BEFORE I proceed in giving an account of the throat distemper, it is proper to tell you, that I have not had opportunities for observing all the appearances which it has made. I have seen it only in my own family, and in a few neighbours in the country, to whom I sometimes give advice, when they cannot obtain assistance otherwise : having entirely laid aside the practice of physic upwards of twenty years. What I chiefly learned was from the late dr. Douglass, of Boston, a gentleman of great skill in medicine, and an accurate observer, having corresponded with him, while this distemper was frequent in the part of the country where I live.

The first appearance of the throat distemper was at Kingston, an inland town of New England, about the year 1735 ; and as this town has no foreign trade, it may be concluded that the disease was not imported.

It spread from thence, and moved gradually westward, so that it did not reach Hudson's river till near two years afterwards. It continued some time on the east side of Hudson's river, before it passed to the west, and appeared first in those places to which the people of New England chiefly resorted for trade, and in the places through which they travelled.

It continued to move westerly, till, I believe, it has at last spread over all the British colonies on the continent.

Though what I have mentioned seems evidently to shew, that this disease was propagated by infection, yet it did not spread in the same manner contagious distempers usually do : for children and young people were

only subject to it, with a few exceptions of some above twenty or thirty, and a very few old people, who died of it. Neither did it spread equally to all places, that were equally exposed to the infection. The poorer sort of people were more liable to have this disease than those who lived well, with all the conveniences of life. It has been more fatal in the country than in great towns. People of a scorbutic habit were most subject to it, and they who fed on pork, or lived on wet and low grounds. In some places, only a few persons or families were seized, while, in others, all escaped. In some families, it passed like a plague through all their children; in others, only one or two were seized with it. Some were seized with it at such a distance from the infected, that it could not be conceived in what manner they could receive the disease by infection. Some families had the disease mildly, while others, in the same place, and at the same time, had a most violent sort.

Ever since it came into the part of the country where I live (now about fourteen years) it frequently breaks out in different families and places, without any previous observable cause; but does not spread as it did at first. Sometimes a few only have it in a considerable neighbourhood. It seems as if some seeds, or leaven, or secret cause remains, wherever it goes: for I hear of the like observations in other parts of the country. Several have been observed to have had it more than once.

The seeds of this distemper seem to be hatching, in the humours of the body, before any particular symptoms of it appear; for children have been observed to languish, for some time, before the disease manifested itself; and a corrosive humour bred in their issues, or in other sores, when they had any, and any constitutional ails were sometimes revived. When

the distemper becomes obvious, it has the common symptoms attending a fever, except that a nausea, or vomiting are seldom observed to accompany it. It is attended with a moist putrid heat, the skin being seldom parched. The pulse is usually low, but frequent and irregular: the countenance dejected, with lowness of spirits: no considerable thirst; the tongue much furred, and the furring sometimes extends all over the tonsils, as far as the eye can reach. At other times, in the milder kind, the tonsils appear only swelled, with white specks of about a quarter of an inch, or half an inch diameter, which are thrown off, from time to time, in tough cream coloured sloughs. When these come off, the tonsils appear deeply pitted and corroded, and the sloughs are soon again renewed. Sometimes all the parts near the gullet or throat, are much swelled, both inwardly and outwardly, so as to endanger a suffocation, and frequently mortify: but most generally the swelling inwardly is not so much as to make swallowing difficult. Sometimes these swellings imposthume.

In different years, and different persons, the symptoms are various. In some seasons it has been accompanied with miliary eruptions all over the skin: and, at such times, the symptoms about the throat have been mild, and the disease generally without danger, if not ill treated. Some have had sores like those on the tonsils, with a corrosive humour behind their ears, on the private and other parts of the body, sometimes without any ulceration in the throat.

The last complaint commonly is of an oppression or straitness in the upper part of the chest, with difficulty of breathing, and a deep hollow hoarse cough, ending in a livid strangled-like countenance, which is soon followed by death.

This disease is not often attended

with that loss of strength that is usual in other fevers; so that many have not been confined to their beds, but have walked about the room till within an hour or two of their death: and it has often appeared no way dangerous to the attendants, till the sick were in the last agonies; though the patients themselves are generally dejected and apprehensive, which by others is too often attributed only to a lowness of spirits. Some died on the fourth or fifth day; others on the fourteenth or fifteenth; some even later; and sometimes the corruption or putrefaction of the humours is so great before any remarkable symptoms appear, that nature is not able to raise a fever for its expulsion. In this case, the sick die suddenly by a general mortification, without a sensible struggle.

It was not discovered, by any anatomical inspection that was made, that any of the bowels were peculiarly affected; only the lungs appeared as in peripneumonic cases; but a general corruption and stench of the humours were very perceptible.

When the sores, after the sloughs cast off, appear of a fiery red, there is great danger; but when they are covered with a black crust, it is a fatal omen; as also when hemorrhages follow on any slight scratch.

When this disease first appeared, it was treated with the usual evacuations in a common angina, and few escaped. In many families, who had a great many children, all died; no plague was more destructive. Generally when the sick fell into the hands of physicians not acquainted with the peculiar malignity of the disease, they miscarried.

However bleeding, or blistering, or lenient purgatives, may, on some occasions, be of use in the beginning of the disease, all sensible evacuations of every kind, after the disease has continued some time, are destructive. The consequences of them are, a ge-

neral tendency in the humours of the body to unsurmountable mortifications; so far, that the orifice made by the lancet in bleeding, and the adjacent parts mortify. So likewise the places where blisters were applied mortify; and the ichor, which issues from them, corrodes all the parts on which it distills, and produces mortifications. Mortifications follow on slight scratches. So general an acrimony has been produced in the humours after evacuations, that a bloody ichor has continued to issue from the body, after death, till the corpse was buried.

Cold air is always found to be prejudicial in the throat-distemper, either by protracting it, or throwing it on the lungs, or on some other part necessary for life. It has been frequently observed, that if persons, seemingly recovered and freed from all the manifest symptoms of the disease, went into the cool air, before the putrid heat or ferment was quite exhausted, they had relapses. All kinds of flesh-meat and fish were prejudicial; and spirituous liquors in any quantity, increased the malignity strongly, though, from a moderate use of them, some thought they found benefit, especially if they were at the same time kept from the cool air.

As the humours in this disease had a manifest tendency to mortifications, and the Peruvian bark, about this time, had become famous in their cure, it was tried by several, but without success.

The only successful method of cure was first discovered by Dr. Douglass of Boston, in the year 1736, and published by him; though, in the country places, very little minded afterwards. It was by confining the sick to bed, in a moderate warmth, so as to keep up constantly a free perspiration, by gentle diaphoretics, given from time to time, with warm teas. Sage tea was most commonly

used. This regimen was to be continued, not only till all the symptoms disappeared, but for some time afterwards, guarding carefully against cold, and using the diaphoretics night and morning. This method I found successful, not only in my own family, but with many of my neighbours. I only used the serpentaria as a diaphoretic, and perhaps it may be the best, as it is found to be a powerful antiseptic. If the disease was taken in the beginning, and this method pursued, seldom any of the terrible symptoms appeared, and the disease went through its course mildly. The use of the serpentaria was found beneficial, even after the appearance of the bad symptoms, and recovered them beyond our hopes. But care must be taken not to give it so as to cause any sweating, for sweating was found to be as prejudicial as any other sensible evacuation.

Dr. Douglass, by letter, informed me that he found well dulcified mercury of use in the throat-distemper, especially when joined with camphire. He thought that it supplied the place of the miliary eruption, which was found so salutary in this disease.

Though topical remedies signify very little, where the general method of cure by perspiration, is neglected; yet they are never omitted, because there is no satisfying the patients or their relations, without them. All greasy or unctuous applications were manifestly injurious.

The common gargle was a decoction of sumach berries and serpentaria, with a little allum dissolved in it. It was thought proper to gargle before they swallowed any thing.

The sores on the tonsils were frequently touched with the compound tincture of aloes mixed with honey.

And when the throat was swelled much, and in danger of mortification, fomentations were made with the decoction of the common bitter and aromatic herbs, in which sal

ammoniac, or, borax, or in want of them, common salt, was dissolved, and sharp vinegar added. Flannel cloths, dipped in this, and wrung out almost dry, were applied to the swellings.

A girl of about ten years of age, in my neighbourhood, at the time that the throat-distemper was frequent in the country, had sores on her private parts, like those on the tonsils in others, but no symptom of the disorder appeared in her throat: the ichor, which issued from them at times, dried up, and then she was seized with violent pains in her belly, which had continued for some time, and which she complained of, when my advice was desired. I ordered her to be confined to her bed, and to take a large dose of the serpentaria, which soon gave her ease, and by continuing the common diaphoretic regimen, she perfectly recovered.

It would be impertinent in me to attempt any kind of reasoning with you on the nature of this disease; but as I have entertained an opinion of the fundamental distinction of the several species of fevers, I gladly embrace this opportunity of submitting it to your judgment and corrections, in hopes that you will favour me with your opinion thereon. I distinguish the humours of the body into three different stages or classes. First, that which circulates only within the larger ramifications of the veins and arteries, and which is properly called blood. Secondly, that which moves slowly in smaller ramifications than those in which the red globular parts can pass, and from which the sensible secretions are made. Thirdly, and lastly, that humour which moves and is contained in still finer ramifications, and which is sometimes distinguished by the name of lymph. This last I take to be the principal instrument in the vital and vegetable functions of an

animal. I suppose that the animal food or nourishment undergoes three different concoctions or digestions, after it has entered the course of the circulation, in these different ramifications; in all which, the humours move slowly: That by a fault in any one or more of these digestions, diseases of different kinds are produced, which may be properly distinguished and ranked, according to the different stages in which these humours circulate, and where the digestion is faulty.

I think that the seat of inflammatory fevers is in the first stage. That when the seat of the fever is in the second stage, it may appear under very different symptoms, as different secretions are more peculiarly affected by it: and lastly, that the fevers, commonly called nervous, have their seat in the third stage.

From this distinction it follows, that the morbid matter in the first class may be most effectually carried off by venesection: in the second by one or more of the sensible secretions: and in the last, by insensible perspiration only.

I conceive that the lymph, which moves separately in the finest and last ramifications of the vessels; has the fewest sensible qualities of any of the humours of the body; and though, in it's natural state, the most benign and mild, like the white of an egg; yet is subject to the greatest alterations, and to become the most offensive. As the white of an egg, by putrefaction, becomes so nauseous, that the least drop of it taken into the stomach, or by any means mixed with the humours, throws the animal into the greatest disorder.

I need not mention to you, that seldom any one humour can be vitiated without affecting the others; and that frequently the fault in the last concoction is owing to some defect in the preceding: and from these a skilful physician will vary his

method of cure in several circumstances. But when the lymph is vitiated by infection, all the other digestions may be in order, and natural, till they become afterwards vitiated by the faulty lymph mixed with them. This distinction must deserve the peculiar regard of the physician.

I think that all those disorders which are commonly called nervous, whether acute or chronical, really proceed from some fault in the lymph; and that the distinction of lax and rigid fibres, is owing to an excess or defect of this humour, or to some other fault in it.

These hints, I am persuaded, are sufficient for you to form a judgment of my opinion in the classing of diseases, how far it is really founded in nature, and how far it may be of use in the cure of diseases. You will oblige me exceedingly, by letting me know your opinion freely. If you think me in an error, I shall insist on your telling me so, from your known candour and humanity, lest I should lead others into the like mistake.

I hope the following observation will not be disagreeable to you, as it relates to nervous fevers. In the year 1746, when I was at Albany, on the affairs of government, while preparations were making for the expedition, as we thought, then, intended against Canada, a nervous fever was epidemical, of which many died; whether from the malignity of the disease, or ignorance of the practitioners, I cannot say: for in no distempers are more errors committed than in nervous. I observed the disease in only one person, a lady. It had the appearance of an intermittent, or rather remittent, with a frequent low pulse, except in the paroxysms, when it was high; a dejection of spirits, great listlessness, an entire prostration of appetite, clammy sweats of a rancid putrescent

smell. The physician who attended her, had treated it as an intermittent without success. She was brought very low, and had an aversion to all kind of medicines. I advised her to drink a glass of old Madeira wine every four or five hours. She very sensibly recovered, by the continued use of the wine, and sooner than could have been expected. A poor man, the same physician's patient, hearing of this lady's recovery, sent to beg a bottle of wine. It was given him, but not without the physician's consent, who permitted it, thinking the case desperate. He did, however, recover, by this means. He drank a gallon in a few days; and used it more freely than was allowed. Several others, in like manner, received benefit by wine. I cannot say of what use Madeira might have been in the beginning of the disease, because the cases which came to my knowledge of its benefit, were after the disease had continued long, and the sick were brought low. It was observable, however, that though many people were seized with this distemper, no one Madeira drinker had it. One gentleman, who, for several days, apprehended he had got the distemper, (as at first they complain only of a general lassitude, and of being neither well nor sick), told us, who took our glasses every evening, and kept well, that he was resolved to go with us that night. He drank very freely, and, from that time, he had no more symptoms. You know, that Hippocrates advises the use of wine in some fevers; but I question if he ever prescribed a bottle of strong wine, such as Madeira wine is, for a dose.

I shall mention one thing more, as not quite foreign to the subject I write on. It has been commonly believed, that inoculation of the small pox was an invention of the Circassians, to preserve the beauty of their women. But from what follows, it

seems probable, that the practice is much older, and that it came from Africa originally, with the distemper itself. I have lately learned from my negroes, that it is a common practice in their country, so that seldom any old people have the disease. They generally inoculate all their young, as soon as the infection comes into the neighbourhood. They tell me, that in the regimen under it, they only abstain from all flesh-meat, and drink plentifully of water acidulated with the juice of limes, which grow large and plentifully in their country. This, perhaps, may be worth observation, in hot seasons. It will be objected, how comes this not to have been sooner discovered, since so many negroes have been for near one hundred years past all over the colonies. But it is not to be wondered at, since we seldom converse with our negroes, especially with those who are not born among us; and though I learned this but lately, when the small pox was among us last spring, by some discourse being accidentally overheard among the negroes themselves, I have had the same negroes above twenty years about my house, without knowing it before this time. I examined them separately, and am persuaded, that, as they live at a great distance from the town, they had never heard of inoculation among us*, and yet they described the method of inoculation the same as ours, viz. by making a small cut in the arm, and applying a little cotton dipped in the variolous pus.

NOTE.

* Turning over accidentally, a little pamphlet, printed at Boston, in 1722, since I wrote what is above, I find, that some negroes in Boston had at that time asserted, that inoculation of the small pox was common in their country.

If what I have wrote, in any man-

ner answers your expectations, I hope you will favour me with your sentiments thereon, which will greatly oblige, sir, your most obedient humble servant,

CADWALLADER COLDEN.



Letter from dr. Hall Jackson to dr. Ezra Stiles, on the efficacy of the *Digitalis Purpurea* in dropsies, &c.

Portsmouth, (N.H.) April 30, 1787.

Sir,

IN the year 1785, that justly celebrated botanist, dr. William Withering, physician to the general hospital in Birmingham, Great Britain, published a treatise on the *Digitalis Purpurea*, (Fox-glove) and its medical uses, with practical remarks on dropsies and other diseases. This valuable treatise came into my hands the same year; it contains more than an hundred and fifty cases of dropsies, many of them of the worst and most complicated kind, cured or relieved by this efficacious plant. I last year received from London, a small quantity of the dried leaves, and some of the same in powder. From repeated trials here, I am fully persuaded, that neither dr. Withering, nor his numerous correspondents, have exaggerated its salutary effects; it is, perhaps, the most powerful *diuretic* in nature, and possesses a remarkable quality of abating the action of the heart, and retarding the circulation of the blood.

By the last ship from London, and last post from Boiton, I was honoured with a very polite, obliging, and interesting letter from dr. Withering, and favoured also with a quantity of seeds of the Fox-glove by him. He writes, "I send more than you will have occasion for, in hopes that you will distribute them into the other States."

It is with much pleasure that I comply with the doctor's humane wish, in enclosing you a small quantity of them, being fully persuaded you will find equal satisfaction in the cultivation of so useful and ornamental a vegetable; it bears a beautiful purple bell-flower, worthy a place in any garden.

I take the liberty of transcribing two other passages in the doctor's letter, which, I think, may, with propriety, accompany the seed. "I am more and more convinced, that the *Digitalis*, under a judicious management, is one of the mildest and safest medicines we have, and one of the most efficacious. I believe it is not necessary to create a nausea, or any other disturbance in the system. I never use more than 1 *scruple fol. suc.* $\frac{1}{2}$ lb. of infusion, and in substance rarely more than 3 *grains* in twenty-four hours."—" *Digitalis* has cured two other cases of insanity in this neighbourhood, and three cases of *hemoptæ*: the latter were of a kind attended with a quick bounding pulse, and I directed the medicine, from the quality I knew it possessed of abating the action of the heart."

I would just mention, that it is a biennial plant, and I conclude it will take some little care to preserve the roots from the severity of the frosts in this cold climate, though it flourishes spontaneously in the fields of England.

My good intention must be my apology in the liberty I have taken in troubling a gentleman of your character with so lengthy a letter, altogether professional. I wish to promulgate so valuable an acquisition in medicine, and am so unfortunate as not to be acquainted with any gentleman of the faculty in your state.

I am, sir, &c.

HALL JACKSON.

The rev. Ezra Stiles, president
of Yale college.

From the European magazine, for August, 1785.

An inestimable dissolvent for the human calculi.

MR. Benjamin Colburne, of Bath, is a gentleman so universally known and esteemed, that were it not for the information of mankind throughout Europe, it would be needless to say, that he is a man of ample fortune, of the utmost candour, and possesses unbounded philanthropy: that being bred to physic (from the practice of which he has many years since retired) he has employed his leisure hours in chemical experiments, and with such success, that he has proved, beyond a doubt, on himself, and on several of his friends, that the solution of fixed alkaline salt, saturated with fixable air, will prevent the formation of calculi in the human bladder; nay, that calculi being steeped in that solution, will daily lose of their original weight, and be disposed to crumble and dissolve. The late ingenious dr. Dobson, in his "commentary on fixed air," had conceived that much benefit in many disorders, and particularly the gravel, might be received from the use of medicated waters. But it appears that mr. Colburne is the first man who has experienced, in his own person, the success of his own discovery; and having so done, he generously communicated it to his friends and neighbours, who have been equally relieved, and who were equally willing to have their names and cases published; which not only proves the efficacy of the medicine on a single patient, or constitution, but that it is such as acts on the urine of all human beings. Mr. Colburne's own case, the reverend doctor Cooper, the honourable and reverend G. Hamilton, of Taplow, of Mr. Ainlie, and of a simple man of 65, who would not permit his

name to be published (yet equally benefitted) has been published by dr. Falconer, but published as an appendix to dr. Dobson's "commentary on fixed air." I have, therefore, thought it an act of humanity to give the poor, as well as the rich, the means of relief, by sending you a sketch of this valuable discovery; and it will then be in every man's power, either to prepare the solution himself, or to purchase it at a very moderate price: and they may be sure that this is sent to you with the same good design that it was communicated by the discoverer, whose memory, I have reason to believe, will be revered by many nations. Mr. Colburne informs us, that from several very accurate experiments on the human calculi steeped in alkaline salts, they were reduced in weight, and disposed to dissolve: this led him to try what effect it would produce, by the internal use, on the urine of those who suffer from the gravel or stone, and was agreeably surprised to find that his own (for he was a sufferer himself) from being turbid, and disposed to precipitation, became clear and of a natural colour. But the alkaline salts proving disagreeable and nauseating, he conceived that some more agreeable mode might be contrived to answer the same good purposes. Fixed air seemed to mr. Colburne the best means of success, and experience soon confirmed his hopes. The alkaline solution is thus prepared.

Put two ounces, troy-weight, of dry salt of tartar into an open earthen vessel, and pour upon it two quarts of the softest water to be had, and stir them well together. Let the solution stand for 24 hours, when the clear part must be poured off with care, to avoid any of the residuum, and put into the middle part of one of the glass machines for impregnating water with fixable air, and exposed to a stream of that flu-

id; after the water has been 24 hours in this situation, it will be fit for use, and should be bottled off: well-cork the bottles, and set them up on their corks, bottom upwards; and with such care it will keep several weeks. Eight ounces may be taken three times in 24 hours without any inconvenience: but it may be best to begin with a smaller quantity.

It is needless to enumerate the cases of the other respectable gentlemen, whose names are mentioned above; it is sufficient to say, that mr. Colburne, by an almost constant use of this medicine, enjoys better health and better spirits, though considerably turned of 60, than he had experienced for 20 years before, and never has any symptoms of gravel or stone, but when he happens to neglect (as is sometimes the case, when from home) his accustomed solution. It appears, also, that the other gentlemen whose names are mentioned, and a lady of Bath also, who from delicacy, not folly, has likewise withheld her name, have all experienced the wonderful effects of this very important discovery. Had this medicine been discovered by a practising and professional man, there is not a doubt but it would have made his fortune: or, indeed, had mr. Colburne secretly communicated it to some medical friend (and no doubt he has many) it must, in that case, have enriched an individual. But he has generously given it for the good of all mankind, shewing them how to use it; and therefore I desire it to be extended in your useful and entertaining publication.



To his excellency Edmund Randolph, esq.

December 2, 1787.

Sir,

IT has been reported in various parts of the state, that the reasons

which governed you in your disapprobation of the proposed federal constitution, no longer exist; and many of the people of this commonwealth have wished to know what objections could induce you to refuse your signature to a measure so flattering to many principal characters in America, and which is so generally supposed to contain the seeds of prosperity and happiness to the united states.

We are satisfied, sir, that the time is passed, when you might with propriety have been requested to communicate your sentiments to the general assembly on this subject; but as you have been pleased to favour us with your observations in private, and we conceive they would not only afford satisfaction to the public, but also be useful by the information and instruction they will convey, we hope, you can have no objection to enable us to make them public, through the medium of the press. We have the honour to be, with respectful esteem, sir, your most obedient servants,

M. Smith,

John H. Briggs,

Charles M. Thruston,

Mann Page, jun.

To M. Smith, Charles M. Thruston,
John H. Briggs, and Mann Page,
jun. esquires.

December 10, 1787.

Gentlemen,

YOUR favour of the second instant, requesting permission to publish my letter on the new constitution, gives me an opportunity of making known my sentiments, which, perhaps, I ought not to decline. It has been written ever since its date, and was intended for the general assembly. But I have hitherto been restrained from sending it to them, by motives of delicacy arising from two questions depending before that body, the one respecting the constitution,

the other myself. At this day, too, I feel an unwillingness to bring it before the legislature, lest, in the diversity of opinion, I should excite a contest unfavourable to that harmony with which I trust the great subject will be discussed. I therefore submit the publication of the letter to your pleasure.

I beg leave, however, to remind you, that I have only mentioned my objections to the constitution in general terms, thinking it improper, and too voluminous, to explain them at full length. But it is my purpose to go at large into the constitution, when a fit occasion shall present itself.

I am, gentlemen, &c.

EDMUND RANDOLPH.

A letter of his excellency Edmund Randolph, esq. on the federal constitution.

Richmond, October 10, 1787.

Sir,

THE constitution, which I inclosed to the general assembly, in a late official letter, appears without my signature. This circumstance, although trivial in its own nature, has been rendered rather important to myself at least, by being misunderstood by some, and misrepresented by others—As I disdain to conceal the reasons for withholding my subscription, I have always been, still am, and ever shall be, ready to proclaim them to the world. To the legislature, therefore, by whom I was deputed to the federal convention, I beg leave now to address them; affecting no indifference to the public opinion, but resolved not to court it by an unmanly sacrifice of my own judgment.

As this explanation will involve a summary, but general review of our federal situation, you will pardon me, I trust, although I should transgress the usual bounds of a letter.

Before my departure for the convention, I believed that the confederation was not so eminently defective, as it had been supposed; but after I entered into a free communication with those, who were best informed of the condition and interest of each state—after I had compared the intelligence derived from them, with the properties which ought to characterize the government of our union, I became persuaded, that the confederation was destitute of every energy, which a constitution of the united states ought to possess.

For the objects proposed by its institution were, that it should be a shield against foreign hostility, and a firm resort against domestic commotion; that it should cherish trade, and promote the prosperity of the states under its care.

But these are not among the attributes of our present union. Severe experience, under the pressure of war—a ruinous weakness, manifested since the return of peace—and the contemplation of those dangers, which darken the future prospect—have condemned the hope of grandeur and of safety under the auspices of the confederation.

In the exigencies of war, indeed, the history of its effects is short; the final ratification having been delayed until the beginning of the year 1781. But howsoever short, this period is distinguished by melancholy testimonies of its inability to maintain in harmony the social intercourse of the states; to defend congress against encroachments on their rights; and to obtain, by requisitions, supplies to the federal treasury or recruits to the federal armies. I shall not attempt an enumeration of the particular instances: but leave to your own remembrance, and the records of congress, the support of these assertions.

In the season of peace, too, not many years have elapsed: and yet each of them has produced fatal ex-

amples of delinquency, and sometimes of pointed opposition to federal duties. To the various remonstrances of congress, I appeal for a gloomy, but unexaggerated narrative of the injuries, which our faith, honour, and happiness have sustained by the failures of the states.

But these evils are past: and some may be led, by an honest zeal, to conclude, that they cannot be repeated. Yes, sir, they will be repeated, as long as the confederation exists, and will bring with them other mischiefs, springing from the same source, which cannot be yet foreseen in their full array of terror.

If we examine the constitutions, and laws of the several states, it is immediately discovered, that the law of nations is unprovided with sanctions in many cases, which deeply affect public dignity and public justice. The letter, however, of the confederation, does not permit congress to remedy these defects: and such an authority, although evidently deducible from its spirit, cannot, without a violation of the second article, be assumed. Is it not a political phenomenon, that the head of the confederacy should be doomed to be plunged into war, from its wretched impotency to check offences against this law—and sentenced to witness, in unavailing anguish, the infraction of their engagements to foreign sovereigns?

And yet this is not the only grievous point of weakness. After a war shall be inevitable, the requisitions of congress, for quotas of men or money, will again prove unproductive and fallacious. Two causes will always conspire to this baneful consequence.

First. No government can be stable, which hangs on human inclination alone, unbiassed by the fear of coercion. And secondly, from the connection between states bound to proportionate contributions—jea-

lousies and suspicions naturally arise, which at least chill the ardour, if they do not excite the murmurs of the whole. I do not forget, indeed, that by one sudden impulse, our part of the American continent has been thrown into a military posture, and that in the earlier annals of the war, our armies marched to the field on the mere recommendations of congress. But ought we to argue from a contest thus signalized by the magnitude of its stake, that as often as a flame shall be hereafter kindled, the same enthusiasm will fill our legions—or renew them, as they may be thinned by losses?

If not, where shall we find protection? Impressions, like those, which prevent a compliance with the requisitions of regular forces, will deprive the American republic of the services of a militia. But let us suppose, that they are attainable, and acknowledge, as I always shall, that they are the natural support of a free government. When it is remembered, that in their absence agriculture must languish—that they are not habituated to military exposures, and the rigour of military discipline—and that the necessity of holding in readiness successive detachments, carries the expence far beyond that of enlistments—this resource ought to be adopted with caution.

As strongly too I am persuaded, that requisitions for money will not be more cordially received. For besides the distrust, which would prevail with respect to them also—besides the opinion, entertained by each of its own liberality and unsatisfied demands against the united states, there is another consideration not less worthy of attention. The first rule for determining each quota, was the value of all land granted or surveyed, and of the buildings and improvements thereon. It is no longer doubted, that an equitable, uniform mode of estimating that value, is

impracticable ; and therefore twelve states have substituted the number of inhabitants under certain limitations, as the standard, according to which money is to be furnished. But under the subsisting articles of the union, the assent of the thirteenth state is necessary, and has not yet been given. This does of itself lessen the hope of procuring a revenue for federal uses ; and the miscarriage of the impost almost rivets our despondency.

Amidst these disappointments, it would afford some consolation, if, when rebellion shall threaten any state, an ultimate asylum could be found under the wing of congress. But it is at least equivocal, whether they can intrude forces into a state, rent asunder by civil discord, even with the purest solicitude for our federal welfare, and on the most urgent intreaties of the state itself. Nay, the very allowance of this power, would be pageantry alone, from the want of money and men.

To these defects of congressional power, the history of man has subjoined others, not less alarming. I earnestly pray, that the recollection of common sufferings, which terminated in common glory, may check the sallies of violence, and perpetuate mutual friendship between the states. But I cannot presume, that we are superior to those unfocial passions, which under like circumstances have infested more ancient nations. I cannot presume, that through all time, in the daily mixture of American citizens with each other, in the conflicts for commercial advantages, in the discontents, which the neighbourhood of territory has been seen to engender in other quarters of the globe, and in the efforts of faction and intrigue—thirteen distinct communities under no effective superintending controul (as the united states confessedly now are, notwithstanding the bold terms of the confederation)

will avoid a hatred to each other deep and deadly.

In the prosecution of this enquiry we shall find the general prosperity to decline under a system thus unnerved. No sooner is the merchant prepared for foreign ports with the treasures, which this new world kindly offers to his acceptance, than it is announced to him, that they are shut against American shipping, or opened under oppressive regulations. He urges congress to a counter-policy, and is answered only by condolance on the general misfortune. He is immediately struck with the conviction, that until exclusion shall be opposed to exclusion, and restriction to restriction, the American flag will be disgraced. For who can conceive, that thirteen legislatures, viewing commerce under different relations, and fancying themselves discharged from every obligation to concede the smallest of their commercial advantages for the good of the whole, will be wrought in a concert of action in defiance of every prejudice ? Nor is this all :—let the great improvements be recounted, which have enriched and illustrated Europe—let it be noted, how few those are, which will be absolutely denied to the united states, comprehending within their boundaries the choicest blessings of climate, soil, and navigable waters ; then let the most sanguine patriot banish, if he can, the mortifying belief, that all these must sleep, until they shall be roused by the vigour of a national government.

I have not exemplified the preceding remarks by minute details ; because they are evidently fortified by truth, and the consciousness of united America. I shall therefore no longer deplore the unsuitableness of the confederation to secure our peace ; but proceed, with a truly unaffected distrust of my own opinions, to examine what order of powers the government of the united states ought

to enjoy? how they ought to be defended against encroachments? whether they can be interwoven in the confederation without an alteration of its very essence? or must be lodged in new hands? shewing at the same time the convulsions, which seem to await us from a dissolution of the union or partial confederacies.

To mark the kind and degree of authority, which ought to be confided to the government of the united states is no more than to reverse the description, which I have already given, of the defects of the confederation.

From thence it will follow, that the operations of peace and war will be clogged without regular advances of money, and that these will be slow indeed, if dependent on supplication alone. For what better name do requisitions deserve, which may be evaded or opposed, without the fear of coercion! But although coercion is an indispensable ingredient, it ought not to be directed against a state, as a state, it being impossible to attempt it except by blockading the trade of the delinquent, or carrying war into its bowels. Even if these violent schemes were eligible, in other respects, both of them might perhaps be defeated by the scantiness of the public chest; would be tardy in their complete effect, as the expence of the land and naval equipments must first be reimbursed; and might drive the proscribed state into the desperate resolve of inviting foreign alliances. Against each of them lie separate unconquerable objections. A blockade is not equally applicable to all the states, they being differently circumstanced in commerce and in ports; nay an excommunication from the privileges of the union would be in vain, because every regulation or prohibition may be easily eluded under the rights of American citizenship, or of foreign

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nations. But how shall we speak of the intrusion of troops? shall we arm citizens against citizens, and habituate them to shed kindred blood? shall we risque the inflicting of wounds, which will generate a rancour never to be subdued? would there be no room to fear, that an army, accustomed to fight, for the establishment of authority, would salute an emperor of their own? Let us not bring these things into jeopardy. Let us rather substitute the same process, by which individuals are compelled to contribute to the government of their own states. Instead of making requisitions to the legislatures, it would appear more proper, that taxes should be imposed by the federal head, under due modifications and guards; that the collector should demand from the citizens their respective quotas, and be supported as in the collection of ordinary taxes.

It follows, too, that, as the general government will be responsible to foreign nations, it ought to be able to annul any offensive measure, or enforce any public right. Perhaps among the topics on which they may be aggrieved or complain, the commercial intercourse, and the manner, in which contracts are discharged, may constitute the principal articles of clamour.

It follows, too, that the general government ought to be the supreme arbiter for adjusting every contention among the states. In all their connections, therefore, with each other, and particularly in commerce, which will probably create the greatest discord, it ought to hold the reins.

It follows, too, that, the general government ought to protect each state against domestic as well as external violence.

And lastly, it follows, that through the general government alone can we ever assume the rank,
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to which we are entitled by our resources and situation.

Should the people of America surrender these powers, they can be paramount to the constitutions and ordinary acts of legislation, only by being delegated by them. I do not pretend to affirm, but I venture to believe, that if the confederation had been solemnly questioned in opposition to our constitution, or even to one of our laws, posterior to it, it must have given way. For never did it obtain with us a higher ratification, than a resolution of assembly in the daily form.

This will be one security against encroachment. But another, not less effectual, is, to exclude the individual states from any agency in the national government, as far as it may be safe, and their interposition may not be absolutely necessary.

But now, sir, permit me to declare, than in my humble judgment, the powers, by which alone the blessings of a general government can be accomplished, cannot be interwoven in the confederation without a change of its very essence; or, in other words, that the confederation must be thrown aside. This is almost demonstrable from the inefficacy of requisitions, and from the necessity of converting them into acts of authority. My suffrage, as a citizen, is also for additional powers. But to whom shall we commit these acts of authority, these additional powers? To congress? When I formerly lamented the defects in the jurisdiction of congress, I had no view to indicate any other opinion, than that the federal head ought not to be so circumscribed. For free as I am at all times to profess my reverence for that body, and the individuals who compose it, I am yet equally free to make known my aversion to repose such a trust in a tribunal so constituted. My objections are not the visions of theory, but the result of my

own observation in America, and of the experience of others abroad. 1. The legislative and executive are concentrated in the same persons. This, where real power exists, must eventuate in tyranny. 2. The representation of the states bears no proportion to their importance. This is an unreasonable subjection of the will of the majority to that of the minority. 3. The mode of election, and the liability to be recalled, may too often render the delegates rather partizans of their own states, than representatives of the union. 4. Cabal and intrigue must consequently gain an ascendancy in a course of years. 5. A single house of legislation will sometimes be precipitate, perhaps passionate. 6. As long as seven states are required for the smallest, and nine for the greatest votes, may not foreign influence at some future day insinuate itself, so as to interrupt every active exertion? 7. To crown the whole, it is scarcely within the verge of possibility that so numerous an assembly should acquire that secrecy, dispatch and vigour, which are the test or excellence in the executive department.

My inference from these facts and principles is, that the new powers must be deposited in a new body, growing out of a consolidation of the union as far as the circumstances of the states will allow. Perhaps, however, some may meditate its dissolution, and others partial confederacies.

The first is an idea awful indeed and irreconcilable with a very early, and hitherto uniform conviction, that without union we must be undone. For before the voice of war was heard, the pulse of the then colonies, was tried and found to beat in unison. The unremitted labour of our enemies was to divide, and the policy of every congress to bind us together. But in no example was this truth more clearly displayed, than in the prudence with which indepen-

dence was unfolded to the sight, and in the forbearance to declare it, until America almost unanimously called for it. After we had thus launched into troubles, never before explored, and in the hour of heavy distress, the remembrance of our social strength not only forbade despair, but drew from congress the most illustrious repetition of their settled purpose to despise all terms short of independence.

Behold, then, how successful and glorious we have been, while we acted in fraternal concord. But let us discard the illusion, that by this success and this glory the crest of danger has irrecoverably fallen. Our governments are yet too youthful to have acquired stability from habit. Our very quiet depends upon the duration of the union. Among the upright and intelligent, few can read without emotion the future fate of the states, if severed from each other. Then shall we learn the full weight of foreign intrigue—then shall we hear of partitions of our country. If a prince, inflamed by the lust of conquest, should use one state, as the instrument of enslaving others—if every state is to be wearied by perpetual alarms, and compelled to maintain large military establishments—if all questions are to be decided by an appeal to arms, where a difference of opinion cannot be removed by negotiation—in a word, if all the direful misfortunes which haunt the peace of rival nations, are to triumph over the land—for what have we contended? Why have we exhausted our wealth? Why have we basely betrayed the heroic martyrs of the federal cause?

But dreadful as the total dissolution of the union is to my mind, I entertain no less horror at the thought of partial confederacies. I have not the least ground for supposing that an overture of this kind would be listened to by a single state; and the presumption is, that the politics of the greater part of the states

flow from the warmest attachment to an union of the whole. If however a lesser confederacy should be obtained by Virginia, let me conjure my countrymen well to weigh the probable consequences, before they attempt to form it.

On such an event, the strength of the union would be divided into two or perhaps three parts. Has it so increased since the war as to be divisible—and yet remain sufficient for our happiness?

The utmost limit of any partial confederacy which Virginia could expect to form, would comprehend only the three southern states and her nearest northern neighbour. But they, like ourselves, are diminished in their real force, by the mixture of an unhappy species of population.

Again may I ask, whether the opulence of the united states has been augmented since the war? This is answered in the negative by a load of debt, and the declension of trade.

At all times must a southern confederacy support ships of war and soldiery. As soon would a navy move from the forest, and an army spring from the earth, as such a confederacy, indebted, impoverished in its commerce, and destitute of men, could, for some years at least, provide an ample defence for itself.

Let it not be forgotten, that nations, which can enforce their rights, have large claims against the united states, and that the creditor may insist on payment from any one of them. Which of them would probably be the victim? The most productive and the most exposed. When vexed by reprisals, or war, the southern states will sue for alliances on this continent, or beyond sea. If for the former, the necessity of an union of the whole is decided. If for the latter, America will, I fear, re-act the scenes of confusion and bloodshed, exhibited amongst most of those nations, which have, too late, re-

pented the folly of relying on auxiliaries.

Two or more confederacies cannot but be competitors for power. The ancient friendship between the citizens of America being thus cut off, bitterness and hostility will succeed in its place. In order to prepare against surrounding danger, we shall be compelled to vest, somewhere or other, power approaching near to a military government.

The annals of the world have abounded so much with instances of a divided people being a prey to foreign influence, that I shall not restrain my apprehensions of it, should our union be torn asunder. The opportunity of insinuating it will be multiplied in proportion to the parts, into which we may be broken.

In short, sir, I am fatigued with summoning up to my imagination, the miseries which will harass the united states, if torn from each other, and which will not end, until they are superseded by fresh mischiefs under the yoke of a tyrant.

I come, therefore, to the last and perhaps only refuge in our difficulties, a consolidation of the union, as far as circumstances will permit. To fulfil this desirable object, the constitution was framed by the federal convention. A quorum of eleven states and the only member from a twelfth, have subscribed it; Mr. Mason of Virginia, Mr. Gerry of Massachusetts, and myself, having refused to subscribe.

Why I refused, would, I hope, be solved to the satisfaction of those who know me, by saying that a sense of duty commanded me thus to act. It commanded me, sir, for believe me, that no event of my life ever occupied more of my reflection. To subscribe seemed to offer no inconsiderable gratification, since it would have presented me to the world as a fellow-labourer with the learned and zealous statesmen of America. But it was

far more interesting to my feelings, that I was about to differ from three of my colleagues; one of whom is, to the honour of the country, which he has saved, embosomed in their affections, and can receive no praise from the highest lustre of language: the other two of whom have been long enrolled among the wisest and best lovers of the commonwealth, and the unshaken and intimate friendship of all whom I have ever prized, and still do prize, as among the happiest of all my acquisitions. I was no stranger to the reigning partiality for the members who composed the convention; and had not the smallest doubt, that from this cause, and from the ardour for a reform of government, the first applauses, at least, would be loud, and profuse. I suspected, too, that there was something in the human breast, which for a time would be apt to construe a temperateness in politics into an enmity to the union. Nay I plainly foresaw, that in the dissensions of parties, a middle line would probably be interpreted into a want of enterprise and decision. But these considerations, how seducing soever, were feeble opponents to the suggestions of my conscience. I was sent to exercise my judgment, and to exercise it was my fixed determination; being instructed by even an imperfect acquaintance with mankind, that self-approbation is the only true reward, which a political career can bestow, and that popularity would have been but another name for perfidy, if to secure it, I had given up the freedom of thinking for myself.

It would have been a peculiar pleasure to me, to have ascertained, before I left Virginia, the temper and genius of my fellow citizens, considered relatively to a government, so substantially differing from the confederation, as that which is now submitted. But this was for many obvious reasons impossible; and

I was thereby deprived of what I thought the necessary guides.

I saw, however, that the confederation was tottering from its own weakness, and that the sitting of the convention was a signal of its total insufficiency. I was therefore ready to assent to a scheme of government, which was proposed, and which went beyond the limits of the confederation, believing, that without being too extensive, it would have preserved our tranquility, until that temper and that genius should be collected.

But when the plan which is now before the general assembly, was on its passage through the convention, I moved, that the state conventions should be at liberty to amend, and that a second general convention should be holden to discuss the amendments, which should be suggested by them. This motion was in some measure justified by the manner in which the confederation was forwarded originally by congress to the state legislatures, in many of which amendments were proposed, and those amendments were afterwards examined in congress. Such a motion was doubly expedient here, as the delegation of so much more power was sought for. But it was negatived. I then expressed my unwillingness to sign. My reasons were the following :

1. It is said in the resolutions, which accompany the constitution, that it is to be submitted to a convention of delegates, chosen in each state by the people thereof, for their assent and ratification. The meaning of these terms is allowed universally to be, that the convention must either adopt the constitution in the whole, or reject it in the whole, and is positively forbidden to amend. If therefore I had signed, I should have felt myself bound to be silent as to amendments, and to endeavour to support the constitution without the correction of a letter. With this

consequence before my eyes, and with a determination to attempt an amendment, I was taught by a regard for consistency not to sign.

2. My opinion always was, and still is, that every citizen of America, let the crisis be what it may, ought to have a full opportunity to propose through his representatives any amendment, which in his apprehension tends to the public welfare.—By signing I should have contradicted this sentiment.

3. A constitution ought to have the hearts of the people on its side. But if at a future day it should be burdensome, after having been adopted in the whole, and they should insinuate, that it was in some measure forced upon them, by being confined to the single alternative of taking or rejecting it altogether, under my impressions and with my opinions I should not be able to justify myself had I signed.

4. I was always satisfied, as I have now experienced, that this great subject would be placed in new lights and attitudes by the criticism of the world, and that no man can assure himself, how a constitution will work for a course of years, until at least he shall have heard the observations of the people at large. I also fear more from inaccuracies in a constitution than from gross errors in any other composition ; because our dearest interests are to be regulated by it, and power, if loosely given, especially where it will be interpreted with great latitude, may bring sorrow in its execution. Had I signed with these ideas, I should have virtually shut my ears against the information which I ardently desired.

5. I was afraid, that if the constitution was to be submitted to the people, to be wholly adopted or wholly rejected by them, they would not only reject, but bid a lasting farewell to the union. This formidable event I wished to avert, by

keeping myself free to propose amendments, and thus, if possible, to remove the obstacles to an effectual government. But it will be asked, whether all these arguments were not well weighed in convention. They were, sir, and with great candour. Nay, when I called to mind the respectability of those with whom I was associated, I almost lost confidence in these principles. On other occasions I should cheerfully have yielded to a majority; on this the fate of thousands, yet unborn, enjoined me not to yield, until I was convinced.

Again may I be asked, why the mode pointed out in the constitution for its amendment, may not be a sufficient security against its imperfections, without now arresting it in its progress?—My answers are, 1. That it is better to amend, while we have the constitution in our power, while the passions of designing men are not yet enlisted, and while a bare majority of the states may amend, than to wait for the uncertain assent of three fourths of the states. 2. That a bad feature in government becomes more and more fixed every day. 3. That frequent changes of a constitution, even if practicable, ought not to be wished, but avoided as much as possible. And 4, that in the present case it may be questionable, whether, after the particular advantages of its operation shall be discerned, three-fourths of the states can be induced to amend.

I confess, that it is no easy task, to devise a scheme which shall be suitable to the views of all. Many expedients have occurred to me, but none of them appear less exceptionable than this, that if our convention should choose to amend, another federal convention be recommended; that in that federal convention the amendments proposed by this or any other state, be discussed; and if incorporated in the constitution or re-

jected, or if a proper number of the other states should be unwilling to accede to a second convention, the constitution be again laid before the same state conventions, which shall again assemble on the summons of the executives, and it shall be either wholly adopted, or wholly rejected without a further power of amendment. I count such a delay as nothing, in comparison with so grand an object; especially too as the privilege of amending must terminate after the use of it once.

I should now conclude this letter, which is already too long, were it not incumbent on me from having contended for amendments, to set forth the particulars, which I conceive to require correction. I undertake this with reluctance; because it is remote from my intentions to catch the prejudices or prepossessions of any man. But as I mean only to manifest, that I have not been actuated by caprice, and now to explain every objection at full length would be an immense labour, I shall content myself with enumerating certain heads, in which the constitution is most repugnant to my wishes.

The two first points are the equality of suffrage in the senate, and the submission of commerce to a mere majority in the legislature, with no other check than the revision of the president. I conjecture that neither of these things can be corrected; and particularly the former; without which we must have risen perhaps in disorder.

But I am sanguine in hoping, that in every other justly obnoxious clause, Virginia will be seconded by a majority of the states. I hope that she will be seconded, 1. In causing all ambiguities of expression to be precisely explained: 2. In rendering the president ineligible after a given number of years; 3. In taking from him either the power of nominating to the judiciary offices, or of filling

up vacancies which therein may happen during the recess of the senate, by granting commissions which shall expire at the end of their next session: 4. In taking from him the power of pardoning for treason, at least before conviction: 5. In drawing a line between the powers of congress and individual states; and in defining the former, so as to leave no clashing of jurisdictions, nor dangerous disputes: and to prevent the one from being swallowed up by the other, under the cover of general words and implication: 6. In abridging the power of the senate to make treaties the supreme laws of the land: 7. In providing a tribunal instead of the senate for the impeachment of senators: 8. In incapacitating the congress to determine their own salaries: and 9. In limiting and defining the judicial power.

The proper remedy must be con- signed to the wisdom of the convention: and the final step which Virginia shall pursue, if her overtures are discarded, must also rest with them.

But as I affect neither mystery nor subtilty in politics, I hesitate not to say, that the most fervent prayer of my soul is the establishment of a firm, energetic government; that the most inveterate curse which can befall us, is a dissolution of the union; and that the present moment, if suffered to pass away unemployed, can never be recalled. These were my opinions, while I acted as a delegate; they sway me, while I speak as a private citizen. I shall therefore cling to the union, as the rock of our salvation, and urge Virginia to finish the salutary work which she has begun. And if after our best efforts for amendments, they cannot be obtained, I scruple not to declare, (notwithstanding the advantage which such a declaration may give to the enemies of my proposal) that I will, as an individual citizen, accept the constitution; because I will regu-

late myself by the spirit of America.

You will excuse me, sir, for having been thus tedious. My feelings and duty demanded this exposition: for through no other channel could I rescue my omission to sign from misrepresentation, and in no more effectual way could I exhibit to the general assembly an unreserved history of my conduct.

I have the honour, sir, to be, with great respect,

your most obedient servant,
EDMUND RANDOLPH.

*The hon. the speaker of the
house of delegates.*



*At a meeting of a respectable number of
inhabitants of the county of Chowan,
and the town of Edenton, at the
court-house in Edenton, on the 8th
day of November, 1787, pursuant
to an advertisement from their repre-
sentatives in the general assembly—
Thomas Benbury, esq. chairman—
the following resolutions were unani-
mously agreed to.*

RESOLVED, that in the opinion of this meeting, this state can have no prospect either of security or honour, but by a firm and indissoluble union with the other states in the confederation.

That the benefits derived from union were most remarkably and providentially displayed by the glorious and successful termination of a war, in which we were for a long time very unequally engaged, and have been no less apparent from the state of anarchy, distress and dishonour, to which we have been exposed since the peace, for want of a continental government of sufficient energy to answer all the purposes for which our confederation can be of any real use to us.

That in our present situation, con-

gress being without either money, credit or resources, (for the voluntary and unanimous concurrence of thirteen states in any one measure, we are now convinced, is a futile dependence) it is full time, if we mean to be a united people, to establish such a government as can keep us together, otherwise that independence, which we have obtained so hardily, and prize so much, will pass away like a shadow, and we shall be numbered among the visionary and unhappy of mankind.

That such being our situation, and when we had almost despaired of any material and honourable change, we view with admiration and gratitude, a system formed by the unanimous concurrence of twelve states, which, magnanimously disdaining petty competitions of local and private interests, embraced with patriotic ardour, the great object of an united government, calculated, (to use their own excellent words) to establish justice, insure domestic tranquility, provide for the common defence, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity.

That amidst other circumstances which fill our hearts with joy on this important occasion, we cannot consider with indifference the distinguished part which our immortal general has taken in this great work, calculated to complete the happiness of which he laid the foundation; and we consider it as an act of providence, for which we ought to be particularly thankful, that he extended to so late a period the valuable life of that venerable man, dr. Franklin, whose wisdom, fortitude, and perseverance had so great a share in establishing the peace and independence of our country.

That it is in vain for us to expect for any abler assistance than that given by those and other illustrious characters in the late convention, whose de-

liberations appear to have been conducted with a degree of temper and assiduity suited to the difficult task they were engaged in: and therefore we think every hour of delay, in carrying their propositions into effect, is unnecessary for any good purpose; and by continuing the present evils of imbecility, anarchy, and national dishonour, may endanger the loss of all those blessings, for the sake of which any government can be of the least use, and a free government must be of the greatest.

Resolved, therefore, that this meeting do earnestly desire that their members for this town and county, do use their utmost efforts to obtain a resolution of the general assembly, appointing the choice and meeting of representatives of the people, in a convention, pursuant to the recommendation of the late convention held at Philadelphia, in order to deliberate on the new constitution proposed; and that the time of holding the said convention be appointed on as early a day as possible.

Resolved, also, that this meeting entertain a very grateful sense of the eminent services rendered to this state by its delegates in the late convention; and are in particular obliged to dr. Williamson for the able and useful information he has this day given on the subject of the new constitution proposed.

By order of the meeting,

(signed)

THOMAS BENBURY, Ch.



Edenton, November 12, 1787.

Address of the grand jury of Edenton.

WE, the grand jury for the district of Edenton considering the present as a very important crisis in the affairs of America, and being

deeply sensible of the necessity of a firm and lasting union among the American states, to insure the common safety and liberty of all, hope it will not be deemed presuming in us, that we take this occasion to express our sentiments on the subject of the new constitution, proposed by the late respectable convention. We believe none can be so ignorant as not to know, and we hope few are so unfeeling as not to regret, the disordered and distracted state in which the affairs of the union have been for a long time past. No sooner was the danger of a common enemy removed, than the states immediately detached themselves from the general concerns of the whole, as if our future fate was out of the power of fortune. The consequence has been, our public debts unpaid, the treaty of peace unfulfilled on both sides, our commerce at the very verge of ruin, and all private industry at a stand, for want of an united vigorous government. Quotas demanded which we can never pay, and congress preserving merely the shadow of authority, without possessing one substantial property of power. These evils dictated the necessity of a change, and the same happy expedient of an union of councils, which formed the confederation, was adopted to remedy its defects. Experience had pointed these out, and we believe it would be difficult to draw together in any country, a body of abler men than the persons appointed on this important occasion. They were not only able men, but entitled to the highest confidence which can be bestowed by any people upon illustrious and successful leaders : and the same patriotism of character which formerly distinguished so many of them in the most trying scenes, was visible in the anxious and deep attention they employed on this momentous subject. A work coming from such men, after such long deliberation, is entitled to our full confidence.

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tled to the outmost respect, especially, as all the states assembled were unanimous, a circumstance that strongly shews the purity of their intentions, their sense of the absolute necessity that a new constitution should be immediately formed, and that little subordinate attentions to local interests, ought to give way to the great object of the general good. There is nothing we hold in greater disdain, nor is there any thing more inconsistent with common prudence, as well as the most ordinary share of public spirit, than that we should cavil about trifles when our all is at stake ; that we should slight the present favourable opportunity, which may be the only one we may ever enjoy, to establish a free and energetic government, when we now lie at the mercy of the most inconsiderable enemy, and have an union in nothing but in name. We admire in the new constitution, a proper jealousy of liberty mixed with a due regard to the necessity of a strong authoritative government. Such a one is as requisite for a confederated, as for a single government, since it would not be more ridiculous or futile for our own assembly to depend for a sanction to its laws on an unanimous concurrence of all the counties in the state, than for congress to depend for any necessary exertion of power on the unanimous concurrence of all the states in the union. One weak, corrupted, or unprincipled state might in such a case destroy the whole. This evil, the effect of which we have already felt, is, in our opinion, happily remedied by the constitution proposed, with an advantage, in addition, of a popular representative of the people at large accompanied with useful checks to guard against possible abuses. It is also a part of the constitution that we observe with particular pleasure, that nine states may at any time make alterations, so that any changes, which

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experience may point out, can be made without the danger of such calamities as are incident upon changes of government in all other countries, where they can be only brought about by a civil war. Nor can we avoid dwelling with delight upon those many provisions, calculated to make us as much one people as possible, and to impress upon the minds of all, that useful and important truth, that our strength consists in union, and nothing can hurt us but division. May this great truth, so important for us, so formidable to our enemies, rest upon the minds of all well wishers to their country, as the watch-word of American liberty and safety! The various attempts that were made to divide us during the war, and the danger of similar efforts being used on the present occasion to make us distrust our best and ablest characters, ought to put us upon our guard that we may not suffer ourselves to be the dupes of an insidious policy working for our destruction. But we trust in God, that the same all-powerful providence, which has hitherto so wonderfully preserved us, will still continue to protect us from the machinations of all our enemies, internal and external; and that by a wise use of the vast advantages in our possession, this country may become, as it seems destined to be, an asylum for all the oppressed upon the globe.

Entertaining these sentiments, which the warmth of our feelings hath carried to a greater length than we intended, we most earnestly wish that the general assembly may appoint the meeting of a convention as early a day as possible, that no reproach of unnecessary delay may lie on us, when, in all human probability, upon our speedy adoption or rejection of this constitution it may depend, whether we shall be truly a nation happy in ourselves, and respected by the rest of mankind, or an

inconsiderable scattered people, perpetually driving to and fro, in search of a perfection which never can be found; amusing ourselves with visionary ideas, when we might be enjoying real blessings, and at length doomed to feel the curse of all human discontent, the consciousness that by rejecting the means providence hath put in our power, we had become both wretched and contemptible.

<i>Wm. Bennet, foreman,</i>	<i>J. Bracket,</i>
<i>C. Clark,</i>	<i>J. Riscoe,</i>
<i>T. Taylor,</i>	<i>L. Lewis,</i>
<i>J. Frizel,</i>	<i>J. Wood,</i>
<i>A. Norstreet,</i>	<i>R. Gray,</i>
<i>W. Righton,</i>	<i>E. Moore,</i>
<i>F. Toms,</i>	<i>J. Perry,</i>
<i>J. Horne,</i>	<i>H. Hill,</i>
<i>R. Boyd,</i>	<i>E. Cook.</i>



At a meeting of sundry respectable inhabitants of the county of Northampton, held at Easton, the 20th day of December, 1787, Alexander Patterson, esq. in the chair.

THE meeting took into consideration the report made to the people of this county by their deputies to the state convention. Whereupon,

Resolved unanimously, first, That we highly approve of the conduct of our deputies in assenting to and ratifying the constitution of the united states, as proposed by the late federal convention.

Second, That the chairman be requested to return our hearty thanks to the said deputies, for their patriotism, public spirit, and faithful discharge of their duty, as representatives of this county.

Third, That their report, together with these resolutions, be transmitted by the chairman to Philadelphia, for publication.

Signed, by order of the meeting,
ALEX. PATTERSON, Ch.

Report of the deputies of Northampton county, in the late convention of the state of Pennsylvania.

Friends and fellow citizens of Northampton county,

THE representatives of this county in the late convention of this state think it their duty, as servants of the public, to lay before you, their constituents, the result of their deliberations upon the new constitution for the united states, submitted to their consideration by a resolve of the legislature for calling a state convention.

The debates at large we have reason to expect will be published, wherein those, whose inclination may lead them to it, will find a detail of all the arguments made use of either for or against the adoption of the constitution. Our intention, therefore, is not to enter fully into an investigation of the component parts of it, but only to inform our constituents that it has been carefully examined in all its parts; that every objection that could be offered to it has been heard and attended to; and that upon mature deliberation, two thirds of the whole number of deputies from the city and counties in this state have, in the name and by the authority of the people of this state, fully ratified it, upon the most clear conviction,

1st. That the state of America required a concentration and union of the powers of government for all general purposes of the united states.

2dly. That the constitution proposed by the late convention of the united states, held at Philadelphia, was the best form that could be devised and agreed upon.

3dly. That such a constitution will enable the representatives of the different states in the union to restore the commerce of all the states in general, and this in particular, to its former prosperity.

4thly. That by a diminution of taxes upon real estates, agriculture may be encouraged, and the prices of lands, which have of late greatly declined, will be increased to their former value.

5thly. That by imposing duties on foreign luxuries, not only arts and manufactures will be encouraged in our own country; but the public creditors of this state and the united states will be rendered secure in their demands, without any perceptible burden on the people.

6thly. That all disputes which might otherwise arise, concerning territory or jurisdiction, between neighbouring states, will be settled in the ordinary mode of distributing justice, without war or bloodshed.

7thly. That the support of government will be less expensive than under the present constitutions of the different states.

8thly. That all partial laws of any particular state for the defeating contracts between parties, or rendering the compliance therewith on one part easier than was originally intended, and fraudulent to the other party, are effectually provided against, by a prohibition of paper money and tender laws. And

9thly. That peace, liberty and safety, the great objects for which the late united colonies, now free independent states, expended so much blood and treasure, can only be secured by such an union of interests as this constitution has provided for.

In full confidence that our unanimous conviction and concurrence in favour of this constitution will meet the entire approbation of our constituents, the freemen and citizens of this county, we have the honour to subscribe ourselves, their devoted servants,

*John Arndt,
Stephen Ballist,
Joseph Horsfield,
David Desbler.*

*Easton, Dec. 20,
1787.*

*RESOLUTIONS of the tradesmen of
the town of Boston.*

Boston, January 7, 1788.

WHEREAS some persons, intending to injure the reputation of the tradesmen of this town, have asserted, that they were unfriendly and adverse to the adoption of the constitution of the united states of America, as proposed on the 17th September last, by the convention of the united states assembled in Philadelphia. Therefore, to manifest the falsehood of such assertions, and to discover to the world our sentiments of the proposed frame of government,

Be it RESOLVED,

1. THAT such assertions are false and groundless; and it is the sense of this body, that all those, who propagate such reports, have no other view than the injury of our reputation, or the attainment of their own wicked purposes, on base and false grounds.

2. THAT in the judgment of this body, the proposed frame of government is well calculated to secure the liberties, protect the property, and guard the rights of the citizens of America; and it is our warmest wish and prayer that the same should be adopted by this commonwealth.

3. THAT it is our opinion, if said constitution should be adopted by the united states of America, trade and navigation will revive and increase, employ and subsistence will be afforded to many of our townsmen, who are now suffering for want of the necessaries of life; that it will promote industry and morality; render us respectable as a nation; and procure us all the blessings to which we are entitled from the natural wealth of our country, our capacity for improvement, from our industry, our freedom and independence.

4. THAT it is the sense of this body, that if the proposed frame of government should be rejected, the

small remains of commerce yet left us, will be annihilated, the various trades and handicrafts dependent thereon, must decay; our poor will be increased, and many of our worthy and skilful mechanics compelled to seek employ and subsistence in strange lands.

5. THAT, in the late election of delegates to represent this town in convention, it was our design, and [in] the opinion of this body, the design of every good man in town, to elect such men, and such only, as would exert their utmost ability to promote the adoption of the proposed frame of government in all its parts, without any conditions, pretended amendments, or alterations whatever: and that such, and such only, will truly represent the feelings, wishes, and desires of their constituents: and if any of the delegates of this town should oppose the adoption of said frame of government in gross, or under pretence of making amendments, or alterations of any kind, or of annexing conditions to their acceptance, such delegate or delegates will act contrary to the best interests, the strongest feelings, and warmest wishes of the tradesmen of the town of Boston.

JOHN LUCAS, per order.



*Extract of a letter from his excellency
general Washington, to a friend in
Fredericksburgh.*

“ I Thank you for your kind congratulation on my safe return from the convention, and am pleased that the proceedings of it have met your approbation.—My decided opinion of the matter is, that there is no alternative between the adoption of it and anarchy. If one state (however important it may conceive itself to be) or a minority of them, should suppose that they can dictate

a constitution to the union (unless they have the power of applying the *ultima ratio* to good effect) they will find themselves deceived. All the opposition to it that I have yet seen, is, I must confess, addressed more to the passions than to reason; and clear I am, if another federal convention is attempted, that the sentiments of the members will be more discordant, or less accommodating than the last. In fine, they will agree upon no general plan. General government is now suspended by a thread. I might go further, and say, it is really at an end, and what will be the consequence of a fruitless attempt to amend the one which is offered, before it is tried, or of the delay from the attempt, does not in my judgment need the gift of prophecy to predict.

“I am not a blind admirer (for I saw the imperfections of the constitution I aided in the birth of before it was handed to the public): but I am fully persuaded it is the best that can be obtained at this time; that it is free from many of the imperfections with which it is charged; and that it, or disunion, is before us to choose from. If the first is our election, when the defects of it are experienced, a constitutional door is opened for amendments, and may be adopted in a peaceable manner, without tumult or disorder.”



Antifederal arguments.

Argument I.

IT has been published to the people, that dr. Franklin was opposed to the constitution, and consented to sign it merely as a witness.

Answer.

Doctor Franklin, in his speech, assigning his reasons for agreeing to the constitution, says, “I hope, therefore, that for our sakes, as a part of the people, and for the sake of our

posterity, we shall act heartily and unanimously in recommending this constitution, wherever our influence may extend.”

II.

It has been published, that mr. Jay had changed his opinion, and affirmed the new constitution to be the most artful trap that had ever been laid to catch the liberties of mankind.

Answer.

Mr. Jay, in his letter to mr. Vaughan, of Philadelphia, says, “You have my authority to deny the change of sentiment it imputes to me, and to declare that, in my opinion, it is advisable for the people of America to adopt the constitution proposed by late convention.”

III.

It is asserted, that mr. Elsworth, of Connecticut, withdrew from the convention.

Answer.

Mr. Elsworth and mr. Sherman, in their joint letter, enclosing the constitution to their legislature, say, “We wish it may meet the approbation of the several states, and be the means of securing their rights, and lengthening out their tranquillity.”

IV.

Mr. Richard Henry Lee, in a letter to the governor of Virginia, says, “It has hitherto been supposed a fundamental maxim, that in governments rightly balanced, the different branches of the legislature should be unconnected, and that the legislative and executive powers, should be separate.”

Answer.

In the British constitution, which is thought to be the best balanced in the world, the legislative and executive powers are not separate. Montesquieu, speaking on this subject, says, the executive power ought to have a share in the legislature, by the power of rejecting; otherwise it would soon be stripped of its prerogative.

V.

Mr. Richard Henry Lee says, in the same publication, "the president is for four years duration, and Virginia (for example) has one vote of thirteen in the choice of him, and this thirteenth vote not of the people, but electors, two removes from the people."

Answer.

By the constitution, the president is to be chosen by ninety-one electors, each having one vote: of this number Virginia has twelve, so that, instead of the thirteenth vote in the choice of president, Virginia (for example) has somewhat more than an eighth.

The constitution also admits of the people choosing the electors, so that the electors may be only one remove from the people.

VI.

It is also said by Mr. Richard Henry Lee, that the people of this country have thought a bill of rights necessary to regulate the exercise of the great power given to their rulers, as appears by the various bills or declarations of rights, whereon the governments of the greater number of the states are founded.

Answer.

Only five states appear, by the book of constitutions, to have a bill of rights, which are the lesser number of states.



To the hon. Richard Henry Lee, esq.

Sir,

YOUR name has been given to the people of America, in a letter to the governor of Virginia, with a number of observations of the utmost importance to the public happiness. Authorized by this circumstance, and the privileges of an American citizen, I have undertaken to address you. Though my want of information and the necessary talents may prevent my doing complete jus-

tice to the particular point which I mean to investigate, I promise you the respect due to your character, and to the honourable employments you have held in the service of our common country. Should I suggest to you or any other fellow citizen, facts and considerations sufficient to remove this objection to the federal constitution, my wishes will be fulfilled. At all events, however, I shall avail myself of the attention which your name will insure to my address, and will carry it, by that advantage, to the minds of our countrymen.

The power of enacting commercial laws by "a bare majority" of the congressional legislature, appears to be a principal objection in your view of the subject; and, if I am rightly informed, it is considered in the same light by the two honourable Virginians, who withheld their names from the act of the federal convention. Such names, sir, and objections, upon so grand a point, it is not my intention to treat lightly; yet your remarks must be dispassionately canvassed, without any undue respect to the eminent characters that suggest or support them.

In order to ascertain in what manner the legislative powers of the united states will be exercised on the commercial subject, it will be necessary to trace the federal legislature up to its several sources. You speak of the supposed danger from this power of congress as an object of peculiar apprehension to the five southern states, from whence I presume, and I hope not unfairly, that you concur with me in considering their true interests as decidedly agricultural—and in believing that the federal legislature, whether in one branch or in the other, so far as it shall be constituted by them, will be duly attentive to the landed interests of America, and cautious against any injurious measures which may be attempted by

the mercantile representatives. Your candour will readily grant, that to those five southern states, we may add Delaware and New-Jersey, two states the most absolutely agricultural of any in the union by reason of the adjacent situations of Philadelphia and New York.

Before we proceed to consider the true leading interest, and views of the six remaining members of our confederacy; let us remember, that upon your own statement, and the evidence of facts, it is clearly established, that in the senate of America, we shall always be certain of a majority of two devoted to her landed interests, and in the house of representatives of a majority of three; for Georgia, the Carolinas, Virginia, Maryland, Delaware and Jersey are to send fourteen votes to the senate, which has twenty-six members, and thirty-four to the federal house of representatives, whose whole number is sixty-five. The erection of Kentucke and Vermont, which appears certain, into independent governments, the increasing population of the western parts of the Atlantic states, and the establishment of new members of the union on the lands of congress, will all operate to lessen the weight of the six states, in regard to which your apprehension exists, and will increase that preponderancy which we see the other seven already possess.

Let us now turn our cool, but close, attention to those six states, from whose supposed views and interests these apprehensions arise. As Pennsylvania enjoys as great a share of foreign commerce as any one of the number, and as her true situation is the most minutely known to me, I will begin therè. The city of Philadelphia, the centre of our commerce, or rather its only mart, sends five members to our state legislature. The district of Southwark has always weight enough to nominate one

member of the county of Philadelphia; and that part of the northern liberties, which joins the city, has always the opportunity of nominating another county member. These form the whole commercial representation in our assembly, upon the most exaggerated statement. Seven persons only in a house, which consists of sixty-nine members—a little more than one tenth of the body. There is not in this commonwealth, nor can there ever be, another sea port. Residing out of Philadelphia, and its above appurtenances, there is not one merchant. But the tree is ever best known by its fruits. The majority of the Pennsylvania members of congress, elected by the ballots of our legislature, are not commercial men. Of our delegates for the last year, and of our delegates for the current year, four out of five in each appointment have not the smallest interest in trade. The fifth, in each year, we find to be the prior of a respectable mercantile house; but though his property in trade must be very considerable, and his commercial connexions are certainly extensive, it is equally certain that his landed estate, and his monies in our public funds, are, each, greater in amount than his capital in trade. It is also a well known fact, that the most influential merchants of Pennsylvania are very capital land-holders in the various counties of this state, and of those adjacent, from Virginia to New York, inclusive. To such a degree are they connected with the agricultural interest, that I will venture to assert in this paper, which is to be published under their eyes; that the property employed by them, (taken collectively), in every species of commerce, is very far short of the value of their landed estates. How different from these are the circumstances of the merchants of Holland, France, or even of Great Britain—yet how unavailing is the influence

of the representatives of the trading and manufacturing towns in that commercial country, when the landed gentlemen unite against them!—We know that on those occasions, when contests arise in our legislature between the agricultural and commercial members, the latter are ever obliged to yield to the irresistible power of the landed interest: and from the construction of the house, which is truly stated in this letter, as well as from the unalterable nature of things in Pennsylvania, this must ever be the case. The importance of our commerce is well understood, but its most sincere and powerful friends admit, and even assert the superior importance of agriculture.

Omitting, at this time, to say any thing of Connecticut, Rhode Island, and New Hampshire, as less extensive in commerce than New York and Massachusetts, I will venture to affirm, without detailing the situation of the two latter states, that the comparative weight of their merchants is very much the same, when opposed to their country gentlemen, as has been stated in respect to Pennsylvania. A little more or less it must necessarily be; but the difference is very greatly in favour of their farmers—If a doubt can exist in regard to either of them, it must be with respect to Massachusetts: but that will vanish, when we remember their great superiority over this state, in the number of free white inhabitants.

By way of general review of this subject, I shall give you the substance, and nearly the words, of a late publication on “the principles of a commercial system for the united states,” addressed to the federal convention, during their late sitting, by a merchant (not a landholder) of Philadelphia.

“Just opinions on our general affairs, must necessarily precede such a wise system of commercial regulati-

ons, as will extend our trade as far as it can be carried, without affecting unfavourably our other weighty interests. It may, therefore, be useful to take a comparative view of the two most important objects in the united states—our agriculture and commerce.

“In a country blessed with a fertile soil, and a climate admitting steady labour, where the cheapness of land tempts the European from his home, and the manufacturer from his trade, we are led, by a few moments of reflection, to fix on agriculture as the great leading interest. From this we shall find most of our advantages result, so far as they arise from the nature of our affairs, and where they are not produced by the coercion of laws: the fisheries are the principal exception.

“In order to make a true estimate of the magnitude of agriculture, we must remember, that it is encouraged by few or no duties on the importation of rival produce—that, with a small exception in favour of our fisheries, it furnishes outward cargoes not only for all our own ships, but those also which foreign nations send to our ports, or, in other words, that it pays for all our importations; that it supplies a part of the clothing of our people, and the food of them and their cattle; that what is consumed at home, including the materials for manufacturing, is four or five times the value of what is exported; that the number of people employed in agriculture, is at least nine parts in ten of the inhabitants of America; that therefore the planters and farmers form the body of the militia, the bulwark of the nation; that the value of property occupied by agriculture, is manifold greater than that of the property employed in any other way; that the settlement of our waste lands, and subdividing our improved farms, is every year increasing the pre-emi-

nence of the agricultural interest ; that the resources we derive from it, are at all times certain and indispensibly necessary ; and lastly, that the rural life promotes health and morality by its active nature, and by keeping our people from the luxuries and vices of the towns. In short, agriculture appears to be the spring of our commerce, and the parent of our manufactures.

“ The commerce of America, including our exports, imports, shipping, manufactures, and fisheries, may be properly considered as forming one interest. So uninformed and mistaken have many of us been, that it has been stated as the greatest object in our affairs, and I fear it is yet believed by some to be the most important interest of New England. But from the best calculations I have been able to make, I cannot raise the proportion of property, or the number of men employed in manufactures, fisheries, navigation, and trade, to one eighth of the property and people occupied by agriculture, even in that commercial quarter of the union. In making this estimate, I have deducted something from the value and population of the large towns, for the idle and dissipated, for those who live upon their incomes, and for supernumerary domestic servants. But the disproportion is much greater, taking the union at large : for several of the states have little commerce, and no manufactures—others have no commerce, and scarcely manufacture any thing. The timber, iron, cordage, and many other articles necessary for building ships to fish or trade—nine parts in ten of their cargoes—the subsistence of the manufacturers, and much of their raw materials—are the produce of our lands. In almost all of the countries of Europe, judicious writers have considered commerce as the handmaid of agriculture. If true there, with us it must be unques-

tionable, for we have few manufactories to throw into the scale against the landed interest. We have in our lands full employment for our present inhabitants ; and instead of sending colonies to new discovered islands, we have adjoining townships and counties, whose vacant fields await the future increase of our people.

“ As a comparative view of the importance of our various interests, thus terminates in a decided and great superiority of agriculture over all the rest combined—as emigration and natural increase are daily adding to the number of our planters and farmers—as the states are possessed of millions of vacant acres, that court the cultivator’s hand—as the settlement of these immense tracts will greatly and steadily increase the objects of taxation, the resources, the powers of the country—as they will prove an inherent treasure, of which neither folly nor chance can deprive us, we should be careful to do nothing that can interrupt this happy progress of our affairs. But should we, from a misconception of our true interests, or from any other cause, form a system of commercial regulations, prejudicial to this great mass of property, to this great body of the people, we shall injure our country during the continuance of the error, and must finally adopt a plan which will promote that evident, most important, and essential interest—the agriculture of the united states.”

Here, sir, let us pause a moment. Let us consider with that candour, which I am sure you love, and which the interesting nature of the subject requires, the foregoing facts and observations. Two conclusions, it appears to me, will inevitably result from them in a mind as just and enlightened as yours ; 1st, that since there is no state legislature in our confederacy, wherein the landed gentlemen will not at all times form a

great and commanding majority, and as there are some in which a commercial interest is entirely unknown, so there is an unquestionable certainty that much the greater part of the federal senate, whom they are to depute, will be always attached to the agricultural interest; and 2ndly, as there is no state in the union in which the planters or farmers do not form an irresistible majority of the people at large, and as there are some in which a permanent mercantile house is not to be found, so there is also an indubitable certainty, that much the greater part of the federal representatives will be always devoted to the landed interest of the united states.

But, sir, let us proceed to your next difficulty on this point. You ask, how are you to build ships in your commonwealth, and from whence are you to procure seamen? I will venture to promise you as many Virginia built ships as you can profitably employ, on as low terms as they can be built in Philadelphia or New York. There is nothing in our commerce more certain; and the merchants of this city know it from the experience of real facts. The port of Philadelphia has ever had, among the vessels belonging to it, great numbers built in the other states, the southern as well as the northern. In regard to seamen, Pennsylvania has few natives in that line. Certain employment, and a little higher wages, will draw them to Virginia from New England, the West Indies, and Europe, as they have always drawn them to Philadelphia.

With respect to the shipping of America, I am very doubtful whether the merchants of those states, that have not large and valuable exports, will continue to own vessels in any great numbers. Many will, no doubt, be built there; but when our country and our commerce are once

more brought to order, the merchants residing at the great scenes of export, will find it profitable and convenient to purchase or build ships, by which the northern owner will be so far interfered with. I will venture, therefore, to predict, that however cheap vessels may be hereafter in New England, there will be many built on the waters of the Chesapeake, and very many owned by the merchants residing on them. Already is the matter arrived to such a point, that few men desire to be the permanent owners of vessels in the New England states. That country has been much deceived by looking to the example of Holland, to produce whose commercial aggrandizement many circumstances conspired, that do not exist at this time, and which can never take place in America. That province was an asylum of religious liberty, or at least of toleration, for the oppressed people of the surrounding nations, a point on which all our states must be happy and equal, as long as no religious test is necessary to a share in our federal government. Holland was also an asylum of political liberty, in regard to which the southern states will be on a footing with the northern. The Dutch lived amongst surrounding nations, who, in the early days of their republic, paid no regard to commerce; whereas every state in America views it with an eager, desiring eye, and pursues it to the utmost of her power. And lastly, the Dutch provinces had, by various means, amassed so large a monied capital, and obtained such a footing in regard to foreign colonies, necessary in the European trade, before the importance of commerce was discovered by their neighbours, that it was impossible to contend with the mighty force of the first, or to deprive them of their strong hold of the last. This you know, sir, was the situation of Holland; but in the

affairs of the united states, foreign colonies, subservient to commerce, must for a long time remain not even a matter of expectation or desire: and if ever the time shall arrive when the American confederacy will possess such dependencies, they must be equally accessible to the vessels of the southern states, and to those of the northern. With respect to a powerful monied capital, the value of their productions must, with the same republican habits and manners, give our southern citizens a decided superiority over their northern brethren.

The steady and unalterable course of events is daily increasing the weight of agriculture, and of the southern states. If we cast our eyes upon a map of America, we shall instantly perceive, that even the unsettled parts of Virginia, the Carolinas, and Georgia, greatly exceed the whole country of New England. Emigration to the eastern states never takes place, but from thence it constantly does; and will keep down their numbers; while, by that very circumstance, as well as by emigration from Europe, will the people of the western and southern country increase and multiply, carrying annually to a greater degree the established preponderancy of agriculture, and throwing still greater weight into the southern scale.

The apprehensions you entertain, concerning the interference of the commercial with the agricultural interests of the united states, ought not to have been reserved. I rejoice at your explicit declaration of them, because I hope it may lead those, whose particular duty it is, to give the subject a thorough investigation, which I confidently trust will terminate in the total dissipation of their fears.

I have the honour to be,
with very great respect, &c.

AN AMERICAN.

*Law case.—Court of common pleas,
Charleston.*

Saunders versus Brisbane.

ON the 25th of May 1785, came on in the court of common pleas in Charleston, a special action brought at the instance of mrs. Ann Saunders, against mr. Brisbane, sheriff to the board of police held in that city in British times. The case appeared to be, that mrs. Saunders sold three negroes to a mr. Lahiffe for upwards of 500l. This sum being reduced (according to the then scale of depreciation) to something about 100l. sterling, a bond was given for the amount. To enforce the payment of interest, the plaintiff was obliged to have recourse to the board of police, in which court she obtained a judgment against mr. Lahiffe for 9l. 16s. This judgment was given to the sheriff, by authority of which he seized upon a negro of mr. Lahiffe; but the plaintiff having no other intention in instituting the suit than to stay property, expressly enjoined the sheriff not to proceed to sale. This order he did not think proper to comply with, and sold a valuable negro, for the low price of 27 guineas. In 1784, mrs. Saunders, being ignorant of the sale, brought a second action against mr. Lahiffe in the court of common pleas, when Lahiffe proved the great injury done to him by this sale, and pleaded, that altho' the negro had been sold under the order of the board of police, at a far inferior price to his value, yet that he should be allowed to discount his full worth on the bond given to mrs. Saunders. Of this opinion were the jury, and estimated his worth at 70l. The balance in favour of the plaintiff then was five pounds, for which sum they gave a verdict. In this distressing situation, mrs. Saunders had no remedy left but the present action. Mr. Attorney

General, as counsel for the defendant, contended that it was a rule in law, that a man who received money for another could not be called upon for more than what he had received. In the present case, whatever ill consequences had happened to Mr. Lahiffe, must be set out of the question, or, if kept in view, must be imputed to Mrs. Saunders, who had brought the first suit; the sheriff had only acted as her agent, or as the servant of the board of police; it was exceedingly hard that he should now be called upon to pay more than he had received for the negro—this sum of 27 guineas he was ready to account for. With respect to the sale taking place in contradiction to the plaintiff's orders, the reason was, that another attachment had been issued against the fellow—Mr. Lahiffe had left the place, and there were circumstances which led to a belief, that the fellow would follow his master. Mr. Fraser, counsel for the plaintiff, said, that the jury were bound by the principles of justice, of equity, and of law, to find a verdict for his client—she had done nothing reprehensible; and yet, without they interposed in her behalf, she must severely suffer. He hoped they would not only give a verdict for the full value of what she had lost in the suit against Lahiffe, but also allow interest up to the present time. The court thought the action was well laid, and that the only point was to ascertain the quantum of damages, which lay in the breasts of the jury, who gave a verdict of thirty pounds in favour of the plaintiff.



*Law report.—Court of king's bench,
London, June 5, 1787.*

Hay versus Haldimand.

THIS was an action of trespass and false imprisonment, brought

by the plaintiff, Mr. Charles Hay, a wine cooper of Quebec, against Sir Frederick Haldimand, as governor of that province, for arresting him on suspicion of high treason, as a man disaffected to the king's government and measures, during the late disputes with America, and confining him in a loathsome cell, during the space of three years and sixteen days.

Mr. Bearcroft, for the plaintiff, proved the warrant of commitment, dated April 10, 1780, signed by H. S. Crummey, by order of his excellency the governor; and the term of imprisonment was candidly admitted by the other side.

Mr. Arthur Murphy, on the same side with Mr. Bearcroft, examined several witnesses, particularly Hector M'Cawly, who proved that the plaintiff was arrested and sent to the pre-vost, the military prison, 16 feet by 24, with seven other prisoners, the filth and nastiness of which was so excessive, that the plaintiff's health was considerably impaired; that all access to him was denied; only that his wife could procure an interview by means of disguising herself in the habit of a Canadian woman—it was also in evidence, that for a considerable length of time the prisoners were obliged to perform the necessities of nature in a large tub, which stood in one corner of the room.

Several depositions also were read, which proved, that at the siege of Quebec, Mr. Hay had refused to take an active part in defending the place, and had with many other gentlemen, on the governor's proclamation for that purpose, retired from the city.

The prosecutor's case being thus proved,

Mr. Erskine for the defendant, made a most animated speech. He represented Sir Frederick Haldimand as a foreigner employed by his majesty in a war of much difficulty; who, with the exception of a few sovereign

princes, was the only foreigner who ever obtained any title in this country ; and who deserved it the more, as the only province now remaining, but of our extensive empire in America was preserved by the activity, and meritorious services of this foreigner, who was the defendant in the present action.—His majesty had intrusted him, with the fullest powers, not only military but civil, which would be a sufficient justification against the process now depending. But independent of the authority with which he was invested, and the circumstances which led him to the proceeding, he hoped the jury would in the first instance reflect on what would be the reasoning of every officer in future, when his personal security was opposed to that of the state. It was not to be imagined, that every officer was sufficiently a lawyer to know what may be the point of law in every part of his conduct ; nor would it be very advisable to make it a necessary consideration for a general, under great exigencies, to reflect how the measures he might be inclined to take, would be approved of by a jury at Guildhall. Waving, however, any defence of that kind, he would rest it chiefly on the discretion and authority which his majesty's commission afforded the defendant ; and would contend, that sir Frederick Haldimand was not only justifiable, but extremely meritorious, in what he had done.

He then produced general M^rLean, as a witness, who proved, that on the prospect of Quebec being besieged by general Arnold, he, as deputy governor, had summoned the inhabitants, and had required their assistance to defend the place ; that mr. Hay, among others, had refused so to do ; that some time after this, two men were apprehended in the woods, one of whom, Kenny, appeared to be a servant to mr. Hay ; that two

bills for 150*l*. with a letter of credit to a mr. Cruded, were found upon Kenny, with a certificate from his old master, of his fidelity and service, couched in very equivocal and ambiguous terms ; that he, general M^rLean, had transmitted this intelligence to general Haldimand, with his suspicions that the certificate in question was calculated only for the purpose of recommending him to the Americans, the better to foment a disposition which then subsisted of joining the American and French army, to reduce Quebec. And a variety of other minute circumstances fully proved that mr. Hay very much disapproved of the American war ; but no evidence of absolute disloyalty was given against him.

Sir H. Clinton confirmed the account of the province of Canada being threatened with an attack from the French and Americans conjunctively, at the time of this imprisonment.

General Robertson's testimony went to the same import.

The whole evidence being closed, Mr. Bearcroft replied to mr. Erskine, and stated that the conduct of general Haldimand, however injudicious, was by no means to be considered as intentionally wrong. He also admitted, that he was invested with a commission of civil as well as military authority ; but he at the same time contended, that at the very time this violence was committed, the province of Canada was in the most profound peace ; the act for suspending the habeas corpus act was fully expired, and there was no legal ground whatever for committing the plaintiff. Nor was there any power to be delegated from the constitutional privileges of England, which could authorise such a commitment as that under which the plaintiff was confined, of " being in custody till further orders." He desired his oppo-

nents to mention any act, which could justify such a proceeding, under any enquiry—and the more so, as there was no legal proof of even sufficient ground for suspicion of misconduct in Mr. Hay.

Judge Buller, in his charge to the jury, said it admitted of no dispute, but that the defendant was invested, by his commission, with powers as well civil as military, but considered it at the same time equally evident, that in the present transaction he acted solely in his civil capacity. He was equally sensible, that there was no law which could justify such a commitment as that which affected the plaintiff; nor was the defendant, in his civil capacity, admitted to receive any other suspicion to justify a commitment, but what was given on oath—a requisite, which, in this case, was wholly dispensed with. The only question, then, for the jury, was, whether the ground was laid strong; which, after recapitulating the various points of evidence, appeared to him by no means to be the case. He recommended, notwithstanding, that the jury might take into their consideration, the motives on which the general acted, which certainly were good ones; and, therefore, without considering whether he had any chance of being reimbursed by the public or not, they should pay some attention to his motives, in the damages they might award, should they give a verdict for the plaintiff.

The jury, after a little consideration, gave a verdict of 200*l.* damages, against the defendant.



Letter on the culture of silk.

To the editor of the Museum,

I Am not a little pleased, sir, to perceive the public attention

turned towards the increase of our manufactures, and especially to learn what noble efforts are about to be made in Connecticut * for the resurrection and multiplication of silk. Your correspondent very justly observes that it is a most capital object. A former governor of Connecticut clothed himself and his family in silk, produced at home. Georgia reckons it one of her staple commodities, and that the middle states are fit for it, is abundantly proved by the enclosed authentic list of cocoons, created merely by the exertion of sound sense in individuals, unaided by any public co-operation, which I send to be recorded in your useful repository. Other articles meriting serious regard, are the cultivation, in large quantities, of the myrtle wax shrub (*myrica cerifera foliis lanceolatis subserratis caule arborescente*) so suitable to the sandy grounds of New Jersey. Bees wax, too, might, without much trouble or expence, be made a considerable head of exportation, now the method is known of taking honey without killing the bees. Indigo, the richest gem of Carolina, succeeds well in Jersey and Pennsylvania, and even grows spontaneously. Cotton ripens there sufficiently, and is easily cultivated. Foreign sheep ought to be procured to improve the present breed. The Ancona hemp, or rather a tall strong flax, is reported as superior to any other sort. Our farmers should introduce foreign grasses, such as sainfoin for light sandy lands, lucerne for rich soils; and it is high time to abandon the unprofitable practice of fallowing their fields, or letting them lie idle for three or four years.

NOTE.

* See American Museum, for October, 1787, page 354—355.

An account of the cocoons (or silk balls) purchased at the filature on Philadelphia during the summer of the year 1771, taken from the original laid before the assembly of New Jersey, by the managers, in December, 1771.

From June 25th, to July 3d, 1771.

	lb.	oz.
Of fundry persons,	71	8
Of ditto,	29	
Of ditto	11	12
Of John Roberts, Philadel-		
phia county,	2	12
Of John Burges, Bucks,	13	
Of Edward Gibbs, Jersey,	27	4
Of Joseph Lippincott, Jersey,	6	1
Of Moles Patterson, Kent on		
Delaware,	40	6
Of James Barns, Bucks co.	10	
Of Rachael Perry, do,	24	8
Of Grace Beale, Chester co.	4	11
Of Rhoda Hibbert, Jersey,	2	8
Of Thomas Dutton, do,	21	9
Of William Hall, Philadel.	10	
Of John Bigonie, Philad. co.	52	2
Of Mary Parker, Darby,	10	
Of Grace Fish, Jersey,	44	
Of Isaac Hornor, do,	13	
Of Elizabeth Atkinson, Jerf.	25	13
Of Sarah Bispham, ditto,	61	8
Of Mary Pearson, Darby,	21	
Of Elizabeth Peacock, Jerf.	7	8
Of Lyndon Brown, Bucks co.	15	2
Of Adam Luz, Philadel.		4
Of Henry Clemens, Jersey,	3	6
Of Abigail Davis, Chester,	3	3
Of Mary Pearson, Daby,	30	12
Of Jos. Morgan, Pensaukin,	62	4
Of Sarah Fordam, Darby,	6	
Of Mary Branson, Jersey,	13	3
Of Aquilla Jones, ditto,	23	8
Of Ann Cole, ditto,	35	8
Of Seneka Lucan, Phil. co.	39	8
Of Samuel Davis, Lancaster,	7	8
Of John Asbridge, ditto,	75	10
Of Hester Johns, Jersey,	4	8

817 15

Purchased from July 4th, to July 10th, 1771.

	lb.	oz.
Of John Shivers, Jersey,	10	
Of Mary Wood, Jersey	29	
Of Ann Cochran, Darby,	25	12
Of Mary Longstreath, Phi. c.	17	
Of Rebecca Worrel, Philad.	6	
Of Mary Lush, Philadel.	29	
Of Rachael Hays, Darby,	13	12
Of Mary Osler, Jersey,	6	8
Of Jas. Millhouse, Chester c.	52	
Of Eliz. Roberts, Philad. c.	1	
Of Sarah Roberts, ditto,	7	
Of Isaac Newton, Jersey,	4	10
Of Hannah Ferimore, Jersey,	8	8
Of Caleb Johnson, Lancaster,	44	4
Of Mary Shoemaker, Phila.	14	6
Of Hannah Brown, Jersey,		14
Of Robert Carle, Pennsylvia.	2	12
Of Mary Richarson, ditto,	3	11
Of Elizabeth Patton, ditto,	23	4
Of Titus Fell, Bucks county,	96	
Of Eliz. Roberts, Philad. co.	1	8
Of Ann Davis, Chester co.	2	15
Of Elizabeth Bonfal, ditto,	7	
Of Mary Davis, ditto,	2	4
Of Sarah Dicks, ditto,	47	10
Of John Etwine, North-		
ampton county,	110	
Of Francis Miller, Phila. co.	13	13

580 7

From July 11th, to the 18th, 1771.

	lb.	oz.
Of Catharine Evans, Che-		
ster county,	14	
Of William Henry, Lan-		
caster,	16	
Of Mary Jones, Chester co.	19	12
Of Priscilla Fentham, Ma-		
ryland,	27	
Of Mary Lust,	5	
Of Frederic Walper,	4	11
Of Joseph Fisher	2	
Of Jacob Myers,	3	10
Of Benjamin Leghman,		9

92 10

From July 18, to July 24th, 1771.

	lb.	oz.
Of William Henry, Lancaster,	1	8
Of fundry persons,	7	6
Of Sarah Wilfon, Philadel.	3	8
Of Isaac Whitlock, Lancas.	4	
Of Sarah Dutton, Phil. co.	10	9
Of Jane Davis, Chester,	28	12
Of Jacob Worral, do.	2	
Of Mary Thorn, Jerfey,	67	13
Of Anna Wetherill, Jerfey,	4	8
Of Marmaduke Watfon,	33	
Of Margaret Reiley, Cheft.	11	10
	<hr/>	
	174	10

From July 25th, to Auguft 1st. 1771.

	lb.	oz.
Of Joseph Lippincott, Jerfey,		4
Of Edward Siddon, do.	12	2
Of John Hoops, Chester,	23	10
Of Isaac Evans, Jerfey,	2	12
Of Henry Thomas, Chester,	8	6
	<hr/>	
	47	2

From Auguft 8th, to the 15th 1771.

	lb.	oz.
Of Nicholas Garrifon, Northampton county,	41	8
	<hr/>	
Purchased from June 25, to July 3, 1771.	817	15
From July 4, to July 10,	580	7
From July 11, to 18,	92	10
From 18 to 24,	174	10
From 25, to Auguft 1,	47	2
From Auguft 8, to Aug. 15,	41	8
	<hr/>	
Total,	1754	4

The whole quantity of cocoons brought to the filature, was about 2300 lb. upwards of 1700 lb. were bought by the managers, the rest were reeled for the owners. 619 lb.

of the 1700 lb. were raised in New Jerfey, and the proprietors of them, in common with thofe raised in Pennsylvania, by way of encouragement, received at leaft one fifth more than the real value. Befides this, two fifths of all the premiums paid by the managers, were to perfons in New Jerfey. Thefe expences, together with furnifhing the filature with proper utensils, hiring reelers at very high wages, to teach others, and fuch accidents and difappointments as are incident to all new undertakings, have fo diminifhed their capital, that the managers found it neceffary to petition the affembly of Pennsylvania in September laft, for their aid and encouragement; but, as it was near the end of the year, that affembly could do no more than, ‘recommend it to the particular notice of the fucceeding affembly as a matter of very great confequence to the intereft of this province.’

The prefent affembly has not yet met to do bufinefs, but the managers cannot doubt of a hearty difpofition in the houfe to patronize the culture of filk in Pennsylvania, as that is all which can be expected from them, and the managers’ funds being too fmall to grant either bounty or premiums another year—therefore, thefe facts are refpectfully fubmitted to the confideration of the legiflature of New Jerfey, hoping, fo public spirited a defign will meet with fuch encouragement in that province, as the trials already made, feem to warrant.

Philadelphia, Dec. 9, 1771.

Signed,
Francis Allifon,
Charles More,
Benjamin Morgan,
Edward Penington,
Isaac Bartram,
Robert Strettel Jones,
Samuel Miles,
Thomas Clifford,
Abel James
Cadwallader Evans.

Many cocoons were also raised and used in private families, so that the quantity of raw silk made during the year 1771, at the very outset of the undertaking, in the middle states was probably more than three thousand pounds avoirdupois, and this when manufactured could not be valued at less than four thousand pounds sterling.

Citizens of America,

Now you are gloriously emancipated from the political thralldom of England, disdain to be held by her in commercial chains. Revive the silk manufacture, establish that of cotton, extend those of iron, copper, lead, leather, fur, clay, wood, linen and woolen, and in a few years the people will be fully employed and multiply exceedingly, the country will abound in gold and silver coin, commerce will spread far and wide over the globe, and agriculture will flourish more than ever in soils and climates adapted to every branch of it.

Perhaps nothing could more especially forward measures so desirable, than the personal example of our prime gentlemen and ladies, for consumption is the best friend to manufacture, and the consumption of foreign luxuries has operated dreadfully against us since the revolution. I am informed by a merchant of New York that the importation of rum alone into that port, during the last year, amounted to upwards of two hundred thousand pounds of their currency.

Will you give me leave to suggest and submit to public consideration, the form of a voluntary association to be signed by all federal officers, civil, naval and military, at the time of taking the oath of office, and to commence with the new government which happily for our native land is soon to be perfected? *Regis ad exemplum totius componitur orbis. Longum iter est per precepta, breve et efficax per exempla.*

Vol. III. No. I.

“ I, G. W. President of the united states of North America (or I, B. F. vice president of the united states of North America, *mutatis mutandis*) do hereby pledge my honour that whenever I perform the functions of my office I will be dressed principally in the manufactures of the united states, and I do promise to pay to the federal clerk of assembly one silver dollar for every day that I shall be discovered, during the times aforesaid, to be dressed in a hat, coat, waistcoat, breeches, shirt, stockings, or shoes of foreign manufacture.”

Such forfeitures to be disposed of for the benefit of American mechanics at the discretion of the president, vice president, senators and representatives in their private capacities.

If it be objected that sufficient materials for such purposes cannot be obtained, I answer, that demand not only increases the quantity to any amount but never fails to meliorate, to diversify and render cheaper the fabrics, as is evinced by the experience of every age and country.



The old bachelor. No. IV.

HAVING in my former numbers, as in the former part of my life, made pretty free with myself, I think it time to tack about and be serious; however I seem so disposed at present, and bachelors from their supposed oddity, have a right to be as various as they please, which indeed is one of their happiest privileges, but as I have been severe upon myself for not marrying, I have a fair pretension to be as severe on those who marry from false motives. They richly deserve what they suffer; many of them are paid for it, and it is right they should have their bargain. As badly off as I am, I had rather be a solitary bachelor, than a miserable married man. No M

wife is better than a bad one, and the same of a husband. As I well know what the inconveniences of a single life are, and can give a shrewd guess at the disquietudes of a miserable married one, I would endeavour, *Dives* like, to warn others how they come into either of these places of torment. While I was pondering upon this subject, I accidentally hit on the following curious dissertation on unhappy marriages, which I have transcribed as a convenient introduction to my future thoughts on that head.

Reflections on unhappy marriages.

Though it is confessed on all hands that the weal or woe of life depends on no one circumstance so critical as matrimony; yet how few seem to be influenced by this universal acknowledgment, or act with a caution becoming the danger!

Those that are undone this way, are the young, the rash and amorous, whose hearts are ever glowing with desire, whose eyes are ever roaming after beauty; these doat on the first amiable image that chance throws in their way, and when the flame is once kindled, would risque eternity itself to appease it. But still, like their first parents, they no sooner taste the tempting fruit but their eyes are opened; the folly of their intemperance becomes visible; shame succeeds first, and then repentance; but sorrow for themselves, soon turns to anger with the innocent cause of their unhappiness; Hence flow bitter reproaches and keen invectives, which end in mutual hatred and contempt: Love abhors clamour and soon flies away, and happiness finds no entrance when love is gone. Thus for a few hours of dalliance, I will not call it affection, the repose of all their future days are sacrificed; and those, who but just before seemed to live only for each other, now would almost

cease to live, that the separation might be eternal.

But hold, says the man of phlegm and economy, all are not of this hasty turn—I allow it—there are persons in the world who are young without passions, and in health without appetite: these hunt out a wife as they go to Smithfield for a horse; and intermarry fortunes, not minds, or even bodies: In this case the bridegroom has no joy but in taking possession of the portion, and the bride dreams of little beside new clothes, visits and congratulations. Thus, as their expectations of pleasure are not very great, neither is the disappointment very grievous; they just keep each other in countenance, live decently, and are as fond the twentieth year of matrimony, as the first. But I would not advise any one to call this state of insipidity happiness, because it would argue him both ignorant of its nature, and incapable of enjoying it. Mere absence of pain will undoubtedly constitute ease; and without ease, there can be no happiness: Ease, however, is but the medium, through which happiness is tasted, and but passively receives what the last actively bestows: if therefore, the rash who marry inconsiderately, perish in the storms raised by their own passions, these slumber away their days in a sluggish calm, and rather dream they live, than experience it by a series of actual sensible enjoyments.

As matrimonial happiness, then, is neither the result of insipidity or ill grounded passion, surely those who make their court to age, ugliness, and all that is detestable both in mind and body, cannot hope to find it, though qualified with all the riches that avarice covets, or Plutus could bestow. Matches of this kind are downright prostitution, however softened by the letter of the law; and he or she who receives the

golden equivalent of youth and beauty so wretchedly bestowed, can never enjoy what they so dearly purchased: The shocking incumbrance would render the sumptuous banquet tasteless, and the magnificent bed loathsome; rest would disdain the one, and appetite sicken at the other; uneasiness wait upon both; even gratitude itself would almost cease to be obliging, and good manners grow such a burden, that the best bred or best natured people breathing, would be often tempted to throw it down.

But say we would not wonder that those who either marry gold without love, or love without gold, should be miserable; I can't forbear being astonished, if such, whose fortunes are affluent, whose desires were mutual, who equally languished for the happy moment before it came, and seemed for a while to be equally transported when it had taken place: If even these should, in the end, prove as unhappy as either of the others. And yet, how often is this the melancholy circumstance? As extacy abates, coolness succeeds, which often makes way for indifference, and that for neglect: Sure of each other by the nuptial band, they no longer take any pains to be mutually agreeable: careless if they displease, and yet angry if reproached; with so little relish for each other's company, that any body's else is more welcome, and more entertaining. Their union thus broke, they pursue separate pleasures; never meet but to wrangle, or part, but to find comfort in other society. After this the descent is easy to utter aversion, which having wearied itself out with heart-burnings, clamours, and affronts, subsides into a perfect insensibility; when fresh objects of love step into their relief on either side, and mutual infidelity makes way for mutual complaisance, that each may be the better able to deceive the other.

I shall conclude with the sentiments of an American savage on this subject, who being advised by one of our countrymen to marry according to the ceremonies of the church, as being the ordinance of an infinitely wise and good God; briskly replied, "That either the christian's God was not so good and wise as he was represented, or he never meddled with the marriages of his people; since not one in a hundred of them, had any thing to do either with happiness or common sense. Hence, continued he, as soon as ever you meet, you long to part, and not having this relief in your power, by way of revenge, double each other's misery: Whereas in ours, which have no other ceremony than mutual affection, and last no longer than they bestow mutual pleasures, we make it our business to oblige the heart we are afraid to lose; and being at liberty to separate, seldom or never feel the inclination. But if any should be found so wretched among us, as to hate where the only commerce ought to be love, we instantly dissolve the band: God made us all in pairs; each has his mate somewhere or other; and it is our duty to find each other out, since no creature was ever intended to be miserable."



Anecdote.

AT the opening of one of the courts of law in Massachusetts, lately, a clergyman was sent for to address the deity—a gentleman present observed, that although this was ever the laudable practice, at the supreme judicial court, *these* courts had never, in his memory, opened with prayer. A sailor, who heard the last remark, observed to his mess-mate, "If so, Jack, I believe as how the ship is really in distress, since they pipe all hands, and now call the parson to his quarters."

S E L E C T P O E T R Y.

A POEM, *addressed to the PEOPLE of VIRGINIA, on New-Year's day,*
1788.

FAIR *Virginia*, ever dear,
See arriv'd th' important year !
While the annual song I pay,
Truth inspires the patriot lay :
Wake !—too long thy sons have
dream'd—

Where's the sister state, that beam'd
Fairer in the dawn of fame,
Glowing with a purer flame ?
Shall the ancient wreaths you gain'd,
By thy latter deeds be stain'd ?
Shall not fed'ral conduct crown
All thy acts of old renown ?
Union into ruin hurl'd,
Shall a tyrant grasp a world ?
Or shall sep'rate *unions* grow,
Endless source of war and woe !
Or, if *anarchy* ensue,
Who hath more to lose than you ?

Shall we basely sell the boon,
Bought with so much blood, so soon ?
Oh ! the muse a tale could tell,
How our heroes fought and fell—
Must our *empire's* short-liv'd reign
Prove they fought and bled in vain ?

Blest Virginians, sum the cost !
Shall the price of blood be lost ?
Lost the blessings ye possess,
Freedom and the pow'r to bless ?
Your's are planted plains and farms,
Villas fair in rural charms ;
Lovely girls and prattling boys,
All the blis of home-born joys ;
When the soothing voice invites
Guests to hospitable rights.—
Your's th' illimitable waste,
Flow'ry meads and valleys vast ;
Your's stupendous cliffs that rise,
Bosom'd high in fleecy skies ;
Your's the Alleganean hills,
Spouting forth in num'rous rills.
List ye, how, from many a shore,

Distant sons of ocean roar ?
Rivers broad to you belong,
Yet to run in deathless song—
Fair Ohio gently roves,
Through the sweet Acanian groves :
Rappahannock (sounding name)
And Fluvanna flow to fame ;
Pohawtan suberbly rolls ;
Great Potomack, void of shoals ;
Mississippi's waves will gain,
Spite of fraud, for you, the main ;
Harvests, by your fields supplied,
Then may float on ev'ry tide.

Go, thou *miscreant*, from whose
tongue
Accents of DISUNION rung ;
At the shrine of *self*, in lies,
Every blessing sacrifice !
Bid the kindling beacons far,
Light the realms to civil war ;
Bid the drum's obstrep'rous sound,
Rumbling run along the ground ;
Bid the trumpet sing to arms,
Swell the cannon's dread alarms ;
Wake the clang of steel again ;
Purple every flood and plain ;
Make the sickning harvest die,
Burning cities scorch the sky :
Heav'n for this, shall on thy head
Chosen bolts of vengeance shed !

Round our forests, on our coast,
We have nobler names to boast—
Liberal souls, by none surpass,
Names with time itself to last.
Hail *Virginia's* patriot sons,
Griffin, Blair, McClurg and Jones !
Join the *Pages* firm and just :
Steward faithful to his trust :
Maddison, above the rest,
Pouring from his narrow chest,
More than *Greek* or *Roman* sense,
Boundless tides of eloquence :
Witbe, who drank the source of truth,
Skill'd in lore of laws from youth ;
Thurston's mind, of ample reach ;
Innis, fraught with pow'rful speech,

Too reluctant to engage !
Pendleton, with locks of age,
 Mild his eye of wisdom beams,
 Lent from other worlds he seems,
 Heav'n resume not such a loan,
 Ere we make his choice our own !
 Erst the *Lees*, a glorious band,
 For their country made a stand,
 Wife and brave, unapt to yield,
 In the council or the field ;
 Why asunder are they torn ?
 Why *his* * loss must millions mourn,
 Who, to glad th' astonish'd earth,
 Spoke an empire into birth ?
 While the awful hour demands,
 Ablest heads and purest hands,
Him, in vain, we call from far,
 Second splendor, other star,
 Light and glory of the age,
Jefferson, the learned sage !
 Yet a *name* adorns our state,
 Great as modest, good as great,
 Though unnam'd, illustrious far,
 PRIDE OF PEACE AND STRENGTH OF
 WAR !

Though a FEW, or false or blind,
 Strive to taint the public mind ;

* *R. H. Lee made the motion in Congress for the declaration of independence, July 4, 1776.*

Trust the muse's heav'n-taught strain,
 All the noise, the labor's vain—
Numbers vast will own the plan,
 That secures the rights of man ;
 Gives the *states* their destin'd place,
 High amidst the human race :
 Our *illustrious hero* then,
 (First of sages, best of men)
 Will the nation's cares assume,
 And again avert its doom.

Bards ! your wreaths immortal
 twine :
 Brighter days begin to shine.
 Come ye freemen ! patriots come !
 Read with me *Columbia's* doom—
 Lo ! involv'd in yonder skies,
 Fair the year of glory lies.
 Ravish'd far, in vision'd trance,
 I behold, with mystic glance,
 Towns extend on many a bank,
 Late with darkling thickets dank,
 And the gilded spires arise,
 Grateful to propitious skies—
 Arts, refinements, morals blest,
 Claim perfection in the west—
 Peace, with commerce in her train,
 Brings a golden age again—
 While our woven wings unfurl'd
 Sail triumphant round the world.
Alexandria, January 10, 1788.



Monitory epistle, addressed to a young lady.

SWEET, lovely girl ! my best, my dearest care,
 As *Hebe* blooming, and as *Venus* fair ;
 Thy tender years no artifice can know,
 A heart like thine can fear no latent foe,
 In ev'ry scene some smiling joy will rise
 And gayest prospects only glad thine eyes ;
 Delusive dreams as real forms appear,
 And sanguine wishes silence ev'ry fear,
 And innocence that knows itself no guile,
 Will see a friend in every specious smile,
 Catch fond belief from ev'ry soothing tongue,
 And paint delight for ever fair and young.
 But know, my fair, a thousand snares surround,
 And ev'ry step you tread is dang'rous ground ;
 From open foes, and less from treach'rous friends,
 E'en prudence scarce her votaries defends !

And prudence comes by sound advice alone :
 Then learn to make these maxims all your own.
 First, know, thy bloom will fade, those roses die,
 And time obscure the brilliance of that eye ;
 Thy winning grace will lose its pow'r to charm,
 Thy smile to vanquish, and thy breast to warm :
 The reign of beauty, like the blooming flow'r,
 Is but the pride and pageant of an hour ;
 To day its sweets perfume the ambient air,
 To morrow sees it shrunk, nor longer fair :
 Such the extent of all external sway ;
 At best, the glory of a short-liv'd day.
 Then let the mind your noblest care engage ;
 Its beauties last beyond the flight of age :
 The mental charms protract each dying grace,
 And renovate the bloom that deck'd the beauteous face.
 Let ev'ry virtue reign within thy breast,
 That heav'n approves, or makes its owner blest ;
 To candour, truth and charity divine,
 The modest, decent, lovely virtues join.
 Let wit well-temper'd meet with sense refin'd,
 And ev'ry thought express the polish'd mind,
 A mind above the meanness of deceit ;
 Of honor pure—in conscious virtue great ;
 In ev'ry change that keeps one steady aim,
 And feels that joy and virtue are the same.
 And O ! let prudence o'er each thought preside,
 Direct in public, and in private guide ;
 Teach thee the snares of artifice to shun,
 And know, not feel how others were undone :
 Teach thee to tell the flatt'rer from the friend,
 And those who love from those who but pretend.
 Ah ! ne'er let flatt'ry tempt you to believe,
 For man is false, and flatters to deceive :
 Adores those charms his falshood would disdain,
 And laughs at confidence he strives to gain.
 And if delight your bosom e'er would taste,
 O shun the vicious, dread the faithless breast !
 Infection breathes where'er they take their way,
 And weeping innocence becomes a prey :
 The slightest blasts a female's bliss destroy,
 And taint the source of all her sweetest joy ;
 Kill ev'ry blossom, over-run each flow'r,
 And wrest from beauty all its charming pow'r :
 The dying bud may burst to life again,
 And herbs o'erspread the snow-invested plain ;
 Green leaves may clothe the wintry widow'd trees,
 And where frost nipt may fan the western breeze——
 “ But beauteous woman no redemption knows
 “ The wounds of honour time can never close ;”
 Her virtue sunk, to light can never rise,
 Nor lustre beam from once guilt clouded eyes,

Fix'd be the mind those pleasures to pursue,
That reason points as permanent and true :
Think not that blifs can mingle with a throng,
Whirl'd by a tide of idle forms along :
Think not that pleasure lives with pomp and state,
Or foothes the bosoms of the rich and great :
Think not to meet her at the ball, the play,
Where flirt the frolicsome and haunt the gay :
Think not she flutters on the public walk,
Or prompts the tongue that pours unmeaning talk,
Or loves the breath of compliment to feel,
Or stamps on crowns her estimable seal :
True female pleasure, of more modest kind,
Springs from the heart, and lives within the mind ;
From noisy mirth and grandeur's rout she flies,
And in domestic duties wholly lies.
As fades the flow'r that's rear'd with tender care,
When left expos'd to storms and chilling air,
So fades the fair in reason's sober eye,
That braves the crowd, nor heeds the danger nigh ;
Who giddy roves with folly's motley queen,
Nor loves the transports of a life serene.
Be thine the friendship of a chosen few,
To ev'ry virtue uniformly true ;
Be thine the converse of some kindred mind,
Candid to all, but not to errors blind :
Prudent to check or warn unguarded youth,
And guide thy steps in innocence and truth.
Those who regard, will fulsome language wave,
And, in the friend sincere, forget the slave :
Will make, like me, your happiness their care,
Nor wink at specks, that render you less fair—
From books, too, draw much profit and delight,
At early morning, and at latest night :
But far, oh far ! from thy chaste eyes remove
The bloated page that paints licentious love,
That wakes the passions, but not mends the heart,
And only leads to infamy and art !
Let Addison's and Johnson's moral page,
And Hawkesworth's pleasing stile thy hours engage.
From Milton feel the warm poetic fire,
Whom all the nymphs of Helicon inspire.
With Thomson round the varied seasons rove,
His chaste ideas ev'ry heart improve.
Let tuneful Pope instruct you how to sing,
To frame the lay, and raise the trembling wing.
Let deathless Shakespear, nature's fav'rite child,
Great above measure, and sublimely wild,
Of human manners give the picture true,
For ever changing, and for ever new—
Such be thy joys—and through this varied life,
Whether a maid, a mother, or a wife,

May fair content for ever fill thy breast,
 And not an anxious care disturb thy rest :
 May love, the purest passion of the skies,
 Play round thy heart, and sparkle in thine eyes !
 May all thy worth be virtue's sweet reward,
 And goodness only claim thy just regard !
 And when this busy scene of life is o'er,
 And vain illusions vex the heart no more,
 'Midst brightest saints, O may I meet my dear,
 And feel that love improv'd I cherish'd here !

ALBERTO.

*A riddle.**From the Pennsylvania magazine.*

MY parent bred me to the sea ;
 I've been where never man could be.
 Long time I rang'd the ocean wide,
 And all the rage of the storms defied :
 Though lowering clouds obscur'd the sky,
 And foaming billows mounted high ;
 Though winds with utmost fury blew,
 And thunders roll'd and lightnings flew ;
 Waves, winds, and thunders all in vain
 Oppos'd my passage through the main.
 At length my parent died, and I
 On shore would needs my fortune try—
 I left the sea—grew fond of show,
 Dress'd neat, and soon became a beau.
 My body's taper, tall, and straight,
 I chiefly dwell among the great ;
 Am, like a bridegroom, clad in white,
 And much the ladies I delight ;
 Attend when Chloe goes to rest—
 Chloe is by my presence blest ;
 Nor ghost nor goblin can she fear,
 Nor midnight hag, if I am near.
 No more a seaman bold and rough,
 I shine at balls, am fond of snuff :
 To gay assemblies I repair,
 And make a flaming figure there.
 At last a burning fever came,
 That quite dissolv'd my tender frame :
 I wasted fast, light-headed grew ;
 Of all my friends not one I knew ;
 Great drops of sweat ran down my side,
 And I, alas ! by inches died.

FOREIGN INTELLIGENCE.

Amsterdam, October 4.

THE negotiations of our city whether with the duke of Brunswick, or at the Hague, have terminated in an entire submission to the court of Prussia, and to her royal highness the princess of Orange, as appears by the following placard :

“ The burgomasters and counsellors of the city of Amsterdam, find themselves obliged to declare to the worthy corps of burghers, that they have always conscientiously endeavoured to act conformably to the advantage of their dear country in general, and that of this city in particular, and that still, in their present circumstances, the good of this city, and that of its inhabitants, is dearer to them than their own lives, and the preservation of their honours, employments and their property.

“ The great and imminent danger in which they are involved, and the little time which with difficulty they had obtained to deliberate, not having permitted them to make fully known to the burghers, all that has been transacted, to preserve this good city from the dreadful mischiefs that seemed to impend, they have been obliged to accede to the points which the other members of the states of Holland have agreed to ; and to charge the deputies of this city to yield to every demand, in case they cannot act otherwise—even the dismissal of the established regents—rather than risque greater damages to the town and inhabitants, in addition to those which they have hitherto suffered ; and after all, perhaps, after having undergone these losses, to be obliged to submit to demands still more afflicting. They call God to witness, from whom nothing can be concealed, and the oath which

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they took on assuming the magistracy, that they have no other view in conceding every thing, than the prevention of the certain and irreparable ruin of the city.

“ Since they are constrained to give up all, they will at least endeavour, and they hope to be able, to preserve the most perfect tranquility and security in this very populous city ; to the effecting of which they expect, with confidence, that the brave burghers, who have exerted themselves with so much zeal for the preservation of the tranquility, will continue to exercise the same efforts, and the same zeal, to maintain public quiet in the city, and to preserve each individual from all manner of violence and oppression.

“ Done the 3d of October,

By me,

H. N. HASSELAER, sec'y.

October 13. A complete revolution has taken place in the political and civil government of this city. The magistrates, who had been removed from their offices by the party in opposition to the stadtholder, were restored to their seats in the senate and city council. On the 9th inst. the grand officers and burghermasters, who had been expelled or secluded by the faction, resumed the exercise of their several stations ; and on the following day the secluded counsellors were reinstated in their offices ; the persons who had been appointed by the faction to supersede them, made a virtue of necessity ; they resigned without any struggle, and gave up employments which they could no longer hold.

On Tuesday last, the burghermasters received the following letter from his highness the duke of Brunswick

wick, dated Amsterdam, the 9th instant :

“ In order to secure the requisition of his Prussian majesty, and the honour of his arms, of being assured of the disarming the auxiliaries and free corps that shall be found in Amsterdam, I demand of the burghermasters and council of the city, for my entire satisfaction of the legal mode of their being disarmed, that the Leyden port, or gate, be delivered to his majesty's troops, that shall appear there to-morrow at noon ; and I pledge myself no one shall come into the city ; that the strictest discipline shall be observed, and that the troops shall stay no longer, after the resolution of the state, with respect to their being disarmed, shall have been put in execution. You see, gentlemen, I ask no more than what the states require, and what other cities, such as Dordrecht and Rotterdam desired of me. C. G. F. D. OF BRUNSWICK.”

In consequence of the above, on Wednesday morning, a deputation of two burghermasters, and two counsellors, waited on his highness, who was near the Leyden port, or gate, in order to settle every thing relative to the present circumstances ; and in the afternoon 150 of the Prussian troops came into the city, took possession of that port, and the following capitulation was agreed upon :

1st. That the Prussian troops shall take possession of the Leyden gate, with one hundred and fifty men and two pieces of cannon.

2d. That two squadrons of light horse should be quartered at Overtoom.

3d. That none of the king's troops come into the city without permission of the magistrates.

4th. That the burghermasters and council of the city shall take the necessary steps for securing of the sluices, at Haarlem and Mulden posts.

5th. That the burghermasters and council shall give to the duke of Brunswick, a daily account how far the resolutions of the city are brought forward.

6th. That monf. Haaren, as commissioner on behalf of the duke of Brunswick, shall be instructed to what extent they have proceeded in disarming the people.

[On the day of the surrender, a skirmish took place in the city between the citizens of the two parties ; it was occasioned by the faction placing wheel-barrows, covered with earth, in those streets through which the stadtholder's friends were advancing on horseback. This with some other insults, caused a battle to ensue, in which some Jews were killed and others wounded. Soon after, however, peace was entirely restored ; and on the 11th, the Prussians took entire possession of Amsterdam.]

Hague, Oct. 7. We learn from Zirickzee in Zealand, that the populace, having met in several parts, have committed the greatest excesses. We have a list of 170 houses which they have pillaged ; more than 50 have been pulled down to the ground ; five persons have had their throats cut. Two hundred families who have escaped these mutineers, have retired to Antwerp, where the Austrian government have granted them an asylum and protection.

London, Oct. 5. The D. of Brunswick having refused any terms short of the entire submission of the city of Amsterdam, was the reason that the advanced guards of the city were attacked on the morning of the 1st instant, by the Prussian troops ; the engagement continued for seven hours, and the Prussians were repulsed in three places, and made their retreat, which occasioned some disorder ; but when the mail came away, the duke was going against Amster-

dam, in full force with all his artillery, and it is supposed is now in possession of that city.

The following is a statement of a special law case, which has lately occurred, (Forward against Pittwood) wherein the defendant was a common carrier, to whom the plaintiff had delivered a parcel of hops, to be carried by the defendant's waggon. The defendant put them into his warehouse, and during the night a fire broke out at an adjoining house, which communicated to and consumed the defendant's warehouse, and the plaintiff's goods therein. The question for the court to determine was, "Whether the plaintiff was entitled to recover." Lord Mansfield stated, that a common carrier is in the nature of an insurer; and that he is liable for every thing, except the act of God and the king's enemies; that is, even for inevitable accidents, with those exceptions. Judgment was therefore given for the plaintiff.

The produce of the fertile and beautiful island of Jamaica, has been long an object of envy with our enemies. The fort of Port Royal is now made very strong. There cannot be too much care taken of 3,500,000 acres of such valuable ground, which is nearly four times as much as all the other British sugar islands put together. The cultivated land of this charming island, the lands cleared of woods, and that applied to pasturage, consist of 600,000 acres; the Savanna, 250,000; the rocky, roads, river courses, &c. 350,000. There remain yet uncultivated 2,350,000 acres. Only about one-fourth of the land fit for cultivation is settled; if the other three were settled, the annual revenue derived from thence to this country would be very considerably enhanced; at present it is not less than 700,000.

October 8. The following is a copy

of an official note presented by Mr. Grenville to the comte de Montmorin, on the 4th of October, 1787.

"HIS Britannic majesty, confiding on that friendship which happily exists between him and his most christian majesty, thinks he has a right of asking some explanations on the subject of those armaments which are now carried on in all the harbours of France. A treaty of peace between the two crowns, settled on principles which seem to insure its permanency, a treaty of commerce lately signed and mutually executed, a reciprocal settlement of the interests of the two nations in the East-Indies, the intimate connections lately entered into by the merchants of both nations, all seem to remove the idea of any hostile intention against Great-Britain; nevertheless, France is arming, and his Britannic majesty cannot trace any European power against which the most christian king can possibly have any cause of complaint.

"The commotions in the united Netherlands, it is true, have alarmed Europe; but the king of Great-Britain reposes too great a confidence in the declarations of his most christian majesty, to believe that he intends to support a drooping party in the province of Holland, against the voice of the majority of those united provinces, with whom alone he has formed an alliance; he cannot therefore suppose that the armaments of France can possibly have that object in view.

"His Britannic majesty, on the other hand, is informed, that the most christian king has lately sent considerable forces to the East-Indies, part of which have stopped at the Cape of Good Hope and Trincomale; neither France nor the united Netherlands have any enemies in that part of the world, and the king of Great Britain feeling himself interest-

ted in those measures more immediately than any other power, wishes to be acquainted with the reasons of those expeditions.

“ His Britannic majesty desires nothing so sincerely as to maintain the harmony which exists between Great Britain and France, and being persuaded that the most christian king is filled with the same sentiment, doubts not but that he will embrace this friendly communication, in order to elucidate the misunderstandings which might arise from the armaments of France.

The comte de Montmorin's answer.

“ The king, persuaded that the explanations which his Britannic majesty wishes to receive, originate in his friendly dispositions, is willing to explain the motive of his armament. The faith reposed in treaties, formerly held so sacred, has been several times violated within this century, in a manner so unprecedented, that it is become the duty of every power to prepare itself for war, even in the bosom of peace, at the least motion of any of its neighbours. All Europe knows that France has not exhibited any precedents of those unjustifiable violations, and the king, too jealous of the dignity of his crown, would disdain taking such an advantage over an unprepared neighbour. His Britannic majesty is not ignorant of the respective situations of France and Great Britain, at the beginning of last August in Europe, as well as in both Indies, and the King having religiously remained since on the defensive, sufficiently evinces the purity of his intentions. His most christian majesty being determined to fulfil his treaty of alliance with the united Netherlands, and wishing to prevent any power from taking advantages of the trouble of those provinces, to seize on some parts of their possessions in Europe, and in both Indies, has thought necessary to be prepared to protect them, as soon

as the states general should require it. The armaments of Great Britain, the negotiations of her ministers in all the European courts, and her well-known steps to dissolve the alliance between France and the united Netherlands, and to accelerate the war between the Ottoman empire and Russia, Austria, and the republic of Venice ; such are the reasons which have obliged the king to increase his means of defence, the extent of which has been proportioned to the preparations carried on in Great Britain. Sheltered now from any danger of surprise, he is firmly determined not to begin hostilities ; and, prepared for war, although sincerely desirous of peace, he waits to lay down his arms, that England should have adopted similar measures.”

Oct. 20. A letter from Amsterdam, dated Oct. 12, says, mr. Van Berkel, and another burger or two, who were most inimical to the stadtholder, made their escape by sea ; and a considerable number of the refractory of the Amsterdammers were sent by the Prussian general to Cleves.

This is an era of great importance in the French monarchy. The malversation of the government has brought on a crisis in the minds of the people. They seem ready to take fire ; and was not the despotic power of the grand monarch supported by a vast standing army, it is believed that the history of France would record a great revolution.

Nov. 8. Since the publication of the declarations, insurances to the West-Indies, which were done at ten percent. in case of war, have fallen to four.

Nov. 9. The loss sustained by the Russian squadron in the Black Sea is now confirmed, and turns out to be infinitely more calamitous than was at first imagined. Besides the one ship of the line, of which we have had accounts as falling into the hands of the Turks, six other men of

war, large, new, and well-equipped ships perished in the storm. This severe blow has completely disabled the Russians for a time, from acting against the Ottoman Porte by sea.

Mr. Nairne, of London, has received a letter from Dr. Franklin, in America; which states, that the cover of his mahogany-box, which held artificial magnets, and fitted it at London and Paris, was too small in America. The air of America must therefore be drier than that of Europe.

Two commissioners on the part of the court of France are shortly expected in England, to observe that the reduction of our navy has taken place agreeably to the ratification. Mons. de Bougainville is one of the persons named, and two British naval officers are to be sent to the French ports in order to observe a like conduct.

Letters from Berlin and Hamburgh declare war between Sweden and Russia to be inevitable; they add, that in the interview at Kaminieck, it was agreed that Poland should provide 30,000 troops, in case of hostilities with the Porte, and that by way of compensation, the republic should be put in possession of Moldavia.

Authentic information was received on the 23d ult. from Holland—the affairs of that distracted republic, are not likely to be so speedily restored to tranquility as it was generally expected. When M. de Thulemeyer, the Prussian ambassador at the Hague, first delivered the memorial that contained the intimation of that monarch's intended interference in the concerns of the states, nothing was said or written upon the subject, as to the motives for his conduct, beyond the mere wish to obtain reparation to the princess of Orange, for the insult she had received; since the surrender of Amsterdam, however, a different language has been held.

On a suggestion being thrown out to the duke of Brunswick, since the capitulation of that place, that it would tend to restore quiet, if the Prussian army were to retire from the city, M. de Thulemeyer sent a regular official intimation to the magistrates, that it was the determination of his master, not to quit Amsterdam until every farthing of the expence he had incurred in consequence of his preparations, was fully paid; at the same time rating the amount of this expenditure upon a most enormous scale.

This has thrown the council of Amsterdam into the utmost consternation. They cannot order the payment of the money, without regular authority from the states, and by their refusal, are exposed to the daily hazard of the plunder of the soldiery. On the declining to advance the sum demanded, M. de Thulemeyer informed them, he should publish a manifesto, declaratory of the purposes and resolutions of his master. On the interposition, however, of the princess of Orange, this violent measure was suspended till the ministers of the court of London should have been consulted. Accordingly a council was held yesterday in the evening, and two extraordinary messengers were dispatched, one to the king of Prussia, at Berlin, and another to Sir J. Harris, at the Hague.



American Intelligence,

Philadelphia, January 2. A letter from a gentleman in Savannah, to his friend in this city, dated Dec. 8, says, "Since your departure from this country, we have been engaged, and are now in a war with the Creek Indians. Small parties have penetrated as low down as the Cononchee, killed our citizens, and done other damage. It is my firm belief, that it might have been stopped in the first stage, had the executive of this

country brought to trial a col. Alexander, who murdered eight or nine Indians on their hunting grounds. The legislature have ordered four regiments to be raised, of seven hundred and fifty men each; and at the expiration of the war, they are to receive a certain tract of country, within the Indian limits, for their services.

“Should the commissioners of North and South Carolina and Georgia, with the continental agent, meet speedily, I have hopes that they will adjust the dispute, whereby the unfortunate families who have been driven from their houses, may return in peace, and enjoy the fruits of their labour.”

A letter from Baltimore, dated Dec. 28, says, “Our assembly were tried, while sitting, for a duty of ore penny per lb. on imported nails, similar to your state: but though it passed the lower house, it was unexpectedly rejected by the senate, who are warm federalists, and thought it wrong to interfere in a matter that would so soon be out of their province.”

In the political society lately instituted at Richmond, in Virginia, the new federal constitution was the subject of a public debate. After three evenings spent in discussing it, the yeas, in favour of it, were one hundred and twenty-eight; the yeas were only fifteen. The members of this society consist of the principal characters in Virginia. The principal speaker against the government, was Patrick Henry, esq. The principal speaker in favour of it, was Mr. Nicholas. It is expected there will be the same majority in the state convention.

Jan. 12. A letter from Carlisle, dated January 4, says, “I dare say you have heard of the unhappy rum-pus which took place here on the 25th ult. The spirit of rage and

discord is increasing every hour; squire Agnew issued warrants for some of the rioters, but none would venture to serve them; a boy indeed was taken, but the people of the town threatening to rise again, and the country people declaring they would come in and pull down the houses of any who should attempt to issue or execute any warrants, he was discharged.

Before the surrender of Amsterdam, water was sold at an English shilling a quart.

Jan. 16. On the ninth inst. the convention of the state of Connecticut, ratified the new constitution, by the following instrument:

“In the name of the people of the state of Connecticut:—We, the delegates of the people of said state, in general convention assembled, pursuant to an act of the legislature in October last, have assented to and ratified, and by these presents do assent to, ratify, and adopt the constitution reported by the convention of delegates in Philadelphia, on the seventeenth day of September, 1787, for the united states of America.

“Done in convention, this ninth day of January, A. D. 1788.

“In witness whereof we have hereunto set our hands.”

The votes for the constitution were 128—against it, 40.

Jan. 30. By late intelligence from Georgia, we are informed that that state has ratified the new constitution.

Portsmouth. (N. H.) Jan. 2. Ten states have called conventions—South Carolina we have not heard from—New-York as yet could not, and Rhode-Island—shame come upon her rulers for it—will not.

Newport, (R. I.) Jan. 10. At a town meeting specially convened at Littlecompton, in this state, on the first day of January instant, for the

purpose of considering the new federal constitution, it was voted, that a committee be appointed to draw up instructions for their deputies in general assembly, who reported accordingly instructions to captain George Simmons and Nathaniel Stiles, esqrs. their deputies, of which the following is an extract :

“ That being deeply impressed with a sense of the extreme need we stand in of a well organized and energetic national government, and viewing the new federal constitution as a plan of government well adapted to the present critical situation of our national affairs, we do therefore enjoin it on you as our positive instructions, that you and each of you do use your utmost endeavours at the next session of the general assembly of this state, to have an act passed, recommending it to the several towns in this state, to choose delegates, as soon as may be, for the purpose of adopting or rejecting the new federal constitution, agreeably to the requisition of the honorable the national convention; and those our positive instructions, gentlemen, you must not fail to execute on pain of procuring our highest displeasure.

Submitted by,

David Hilliard }
Perez Richmond, } Committee.”
John Davis, }

Which report was accepted and passed as the instructions of the town of Littlecompton to their deputies in the general assembly.

Petersburgh, Jan. 3. By an act of the present general assembly, the following duties are imposed on imported articles, payable in certificates, to take place the first day of March next.

	£.	s.	d.
Rum per gallon,	0	1	0
Brandy and other distilled spirits,	0	1	0
Madeira wine per gallon,	0	1	6
Other wines, ditto,	0	1	0
Porter,	0	0	9

Snuff per bottle,	0	1	0
Manufactured tobacco per lb.	0	1	0
Loaf and lump sugar per lb.	0	0	3
Coffee per lb.	0	0	3
Pepper, ditto,	0	0	6
Other spices,	0	0	4
Dressed leather per lb.	0	0	6
Tann'd ditto per lb.	0	0	4
Bohea tea,	0	1	0
Other teas,	0	2	0
Cordage per cwt.	0	4	0
Bar iron, per cwt.	0	4	0
Pots and other castings,	0	4	0
Nail rods per cwt.	0	6	0
Wine in quart bottles, and others in proportion, per dozen,	0	3	0
Malt liquors in quart bottles per ditto,	0	2	6
Chariots and coaches,	20	0	0
Other four wheel carriages,	15	0	0
Two wheel carriages,	10	0	0
Clocks,	5	0	0
Axes per dozen,	0	8	0
Hoes per dozen,	0	6	0
Saddles a piece,	0	12	0
Ladies stuff or Morocco shoes per pair,	0	1	0
Ladies silk ditto,	0	2	0
Men's and women's shoes,	0	1	0
Shoe boots per pair,	0	6	0
Boot legs per pair,	0	1	6
Playing cards per dozen,	1	10	0
Coal per bushel,	0	0	6
Salt beef per cwt.	1	0	0
Ditto pork per cwt.	1	0	0
Candles per lb.	0	0	4
Butter per lb.	0	0	4
Soap per lb.	0	0	4

On all ready made wearing apparel not before enumerated (except gloves and stockings) or metal coat and waistcoat buttons, on all horse and carriage whips and walking canes, on all gold and silver lace, ten per cent. ad valorem, and upon all goods, wares, and merchandize, whatsoever, not above enumerated, except salt, a duty of three per cent.

Wilmington, (Del.) Jan. 9. On Thursday last, at a meeting of the

principal inhabitants of this borough, the following resolutions were agreed to, and signed :

That from and after the first day of January, 1788, we will kill no lamb, for sale, or our family use ; nor buy any of the same, or suffer it to be bought or used in our families, until the first day of January, 1789.

That on the first day of January

next, we will appear in a complete dress of the manufacture of one or more of the united states, at a general meeting to be held on that day.

That we will encourage and promote, as much as we reasonably can, the use of American manufactures, by giving them the preference to foreign articles, when there is any reasonable proportion between their prices and goodness.

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For FEBRUARY, 1788.



..... "With sweetest flow'rs enrich'd,
"From various gardens cull'd with care."

..... "Collecta revirescunt."



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T H E
A M E R I C A N M U S E U M,

For F E B R U A R Y, 1788.



An oration, delivered July 4, 1787, before the society of the Cincinnati, of the state of New York; in commemoration of the independence of America. By the honourable Robert Livingston, esq. chancellor of that state.

I COULD have wished, gentlemen, that the task, I am now about to perform, had been assigned to some abler speaker; and, in that view, I long since tendered my apology for declining it, and hoped, 'till lately, that it had been accepted. Disappointed in this hope, and unwilling to treat any mark of your favour with neglect, I determined to obey your commands; although I was satisfied, that, in the execution of them, I should not answer your expectations. There is a stile of eloquence, adapted to occasions of this kind, to which I feel myself unequal;—a stile, which requires the glowing imagination of younger speakers, who, coming recently from the schools of rhetoric, know how to dress their sentiments in all its flowery ornaments. The turbulence of the times, since I first entered upon public life, and the necessity it imposed upon those who engaged in it, of attending rather to things than words, will, I fear,

render me, if not an useless, at least an unpolished speaker.

If the mind dwells with pleasure on interesting events—if the soul pants to emulate the noble deeds it contemplates—if virtue derives new force from the successful struggles of the virtuous, it is wise to set apart certain seasons, when, freed from meaner cares, we commemorate events, which have contributed to the happiness of mankind, or afford examples worthy their imitation. What are we this day called upon to commemorate?—Some signal victory, in which the victor weeps the loss of friends, and humanity mourns over the graves of the vanquished?—The birth of some prince, whom force, fraud, or accident, has entitled to a throne?—Or even that of some patriot, who has raised the reputation, and defended the rights of his country?—No, gentlemen! a nobler subject than the splendor of victories, or the birth of princes, demands our attention. We are called upon, to commemorate the successful battles of freedom, and the birth of nations!

It may be expected (and indeed I believe it is usual on such occasions) that I should tread the steps we have taken, from the dawn of oppression, to the bright sunshine of indepen-

dence ; that I should celebrate the praise of patriots who have been actors in the glorious scene, and more particularly that I should lead you to the shrines of those who have offered up their lives in support of their principles, and sealed with their blood your charters of freedom. Had I no other object in view, than to amuse you and indulge my own feelings, I should take this path. For what task more delightful, than to contemplate the successful struggles of virtue ; to see it at one moment panting under the grasp of oppression, and rising in the next with renewed strength ; as if, like the giant son of earth, she had acquired vigour from the fall ; to see hope and disappointment, plenty and want, defeats and victories, following each other in rapid succession, and contributing, like light and shade, to the embellishment of the piece ! What more soothing to the soft and delicate emotions of humanity, than to wander with folded arms, and slow and pensive step, amidst the graves of departed heroes, to indulge the mingled emotions of grief and admiration : at one moment giving way to private sorrow, and lamenting the loss of a friend, a relation, a brother ; in the next, glowing with patriot warmth, gazing with ardor on their wounds, and invoking their spirits, while we ask of heaven to inspire us with equal fortitude ! But however pleasing this task, the desire of being useful impels me, at this interesting moment, to forego this pleasure---to call you from this tender scene---to remind you that you are the citizens of a free state---to bid you rejoice with Roman pride, that those you love, have done their duty---to exhort you to crown the glorious work they have begun ; for, alas ! my friends, though they have nobly performed the part assigned them, the

work is still unfinished, and much remains for us to do. It may not, therefore, be improper, amidst the congratulations I make you on this day---this day, distinguished in the annals of fame, for the triumph of freedom and the birth of nations, to enquire how far it has been productive of the advantages we might reasonably have expected, and where they have fallen short of our expectations.

To investigate the causes that have conduced to our disappointment, two objects demand our attention---our internal and federal governments : either, to those who are disposed to view only the gloomy side of the picture, will afford sufficient matter for censure, and too much cause of uneasiness. Many desponding spirits, misled by their reflections, have ceased to rejoice in independence, and to doubt whether it is to be considered as a blessing. God forbid that there should be any such among us. For, whatever may be the pressure of our present evils, they will cease to operate, when we resolve to remove them ; the remedy is within our reach, and I have sufficient confidence in our fortitude, to hope that it will be applied.

Let those, however, who know not the value of our present situation, contrast it with the state of servitude, to which we should have been reduced, had we patiently submitted to the yoke of Britain. She had long since seen our ease with envy, and our strength with jealousy. Loaded with debt, she wished to share that assistance, which she attributed to her protection, rather than to our industry. Tenacious of her supposed supremacy, she could not be indifferent to those increasing numbers which threatened its subversion.

Avarice and timidity concurred in framing a system of despotism, which, but for our resistance, would

have reduced us to the vilest subjection. Having resisted, accommodation was vain; pretences would not have been wanting to ruin those that had been active in opposition. Disputes among ourselves would have been encouraged; and advantages, derived from our disunion, would have enabled her ultimately to obtain her object. No alternative was left, but independence, or abject submission. We have chosen as became a wife and generous people. Let slaves or cowards disapprove the choice.

Our constitutions are formed to ensure the happiness of a virtuous nation. They guard against the tumult and confusion of unwieldy popular assemblies, while they yield to every citizen his due share of power. They preserve the administration of justice pure and unbiassed, by the independence of the judges.—They prevent abuses in the execution of the laws, by committing the care of enforcing them to magistrates who have no share in making, nor voice in expounding them. In these circumstances, they excel the boasted models of Greece, or Rome, and those of all other nations, in having precisely marked out the power of the government, and the rights of the people. With us the law is written: no party can justify their errors under former abuses or doubtful precedents. With these constitutions, I shall be asked, how it has happened that the evils hinted at continue to exist? I shall endeavour to answer this enquiry, since my object in treating of this subject is to impress upon you the obligations we are under as citizens, as men whose past services entitle us to some weight in the community, zealously to unite in promoting a constitutional reform of every abuse, that affects the government.

Our constitutions being purely de-

mocratic, the people are sovereign and absolute. The faults of absolute governments are to be charged to the sovereign:—in ours they must be traced back to the people.

If our executive has sufficient energy, if the judicial is competent to the administration of justice, if our legislative is so formed, that no law can pass without due deliberation, all the ends of government are answered, so far as they depend upon the constitution. If still it falls short of expectation, the evils must be sought in the administration: and since every person concerned in that, is either mediately or immediately chosen by the people, they may change it at pleasure. What can be devised more perfect than that constitution, which puts in the power of those, who experience the effects of a mal-administration, to prevent their continuance; not by mad, tumultuous and irregular acts, as in the ancient republics, but by such as are cool, deliberate and constitutional? If they still exist, they must be charged to the negligence of the people, who after violent agitation, have sunk into such a state of torpor and indifference, with respect to government, as to be careless, into what hands they trust their dearest rights. When we chuse an agent to manage our private affairs, an executor to distribute our estate, we are solicitous about the integrity and abilities of those we entrust: we consult our friends: we make the choice after due deliberation—Is it not astonishing, that when we are to elect men, whose power extends to our liberty, our property, and our lives, we should be so totally indifferent, that not one in ten of us tenders his vote?—Can it be thought that an enlightened people believe the science of government level to the meanest capacity? That experience, application, and education are unnecessary to those who are to frame

laws for the government of the state? And yet, are instances wanting, in which these have been proscribed, and their place supplied by those insidious arts, which have rendered them suspected? Are past services the passport to future honours? Or have you yourselves, gentlemen, escaped the general obloquy? Are you not calumniated by those you deem unworthy of your society? Are you not even shunned by some who should wear with pride and pleasure this badge of former services?

You have learned in the school of adversity, to appreciate characters. You are not formed, whoever may direct, to promote measures you disapprove. Men, used to command and to obey, are sensible of the value of government, and will not consent to its debasement. Your services entitle you to the respect and favor of a grateful people. Envy, and the ambition of the unworthy, concur to rob you of the rank you merit.

To these causes, we owe the cloud that obscures our internal governments. But let us not despair; the sun of science is beginning to rise: and, as new light breaks in upon the minds of our fellow citizens, that cloud will be dispelled.

Having observed that our internal constitutions are adequate to the purposes for which they were formed; and that the inconveniencies we have some time felt under them, were imputable to causes which it was in our power to remove: I might perhaps add, that the continuance of those evils, was a proof of the happiness these governments impart; since, had they not been more than balanced by advantages, they would have pressed with such weight, as to have compelled the people to apply the remedy the constitution affords.—But, when I turn my eyes to the other great object of a patriot's attention—

our federal government, I confess to you, my friends, I sicken at the sight. Nothing presents itself to my view, but a nerveless council, united by imaginary ties, brooding over ideal decrees, which caprice, or fancy, is at pleasure to annul, or execute! I see trade languish—public credit expire—and that glory, which is not less necessary to the prosperity of a nation, than reputation to individuals, a victim to opprobrium and disgrace. Here, my friends, you are particularly interested: for, I believe, I should do little justice to the motives that induced you to brave the dangers and hardships of a ten years' war, if I supposed you had nothing more in view, than humble peace, and ignominious obscurity. Brave souls are influenced by nobler motives; and I persuade myself, that the rank and glory of the nation you have established, were among the strongest that nerved your arms, and invigorated your hearts. Let us not then, my friends, lose sight of this splendid object; having pursued it through fields of blood, let us not relinquish the chase when nothing is necessary to its attainment, but union, firmness, and temperate deliberation.

In times of extreme danger, whoever has the courage to seize the helm, may command the ship: each mariner trusting his own skill, is ready to repose upon that of others. Congress, not attending to this reflection, were misled by the implicit respect, that during the war was paid to their recommendations; and without looking forward to times when the circumstances which made the basis of their authority, should no longer exist, they formed a constitution only adapted to such circumstances. Weak in itself, a variety of causes have conspired to render it weaker. Some states have totally neglected their representation in congress; while some others have been inattentive,

in their choice of delegates, to those qualities, which are essential to the support of its reputation : objects of some moment, where authority is founded on opinion only. To these, I am sorry, gentlemen, to add a third, which operates with peculiar force in some states—the love of power, of which the least worthy are always the most tenacious. To deal out a portion of it to congress, would be to share that, which some, among those who are elected by popular favour, already find too little for their own ambition. To preserve it, rulers of free states practise a lesson they have received from eastern tyrants : and as these, to preserve the succession, put out the eyes of all, that may approach the seat of power : so those strive to blind the people, whose discernment, they fear, may expel them from it.

I will not wear your patience and my own, by contending with those chimeras they have raised, to fright the people from remedying the only real defect of this government : nor will I dwell upon that wretched system of policy, which has sunk the interest and reputation of such states in the great council of America, and drawn upon them the hatred and contempt of their neighbours. Who will deny that the most serious evils daily flow from the debility of our federal constitution ? Who but owns, that we are at this moment colonies, for every purpose but that of internal taxation, to the nation from which we vainly hoped our sword had freed us ? Who but sees, with indignation, British ministers daily dictating laws for the destruction of our commerce ? Who but laments the ruin of that brave, hardy and generous race of men, who are necessary for its support ? Who but feels, that we are degraded from the rank we ought to hold among the nations of the earth—Despised by some, mal-treated by

others, and unable to defend ourselves against the cruel depredations of the most contemptible pirates ? At this moment—yes, great God, at this moment, some among those, perhaps, who have laboured for the establishment of our freedom, are groaning in Barbarian bondage. Hands, that may have wielded the sword in our defence, are loaded with chains. Toilsome tasks, gloomy prisons, whips and tortures, are the portion of men, who have triumphed with us, and exulted in the idea of giving being to nations, and freedom to ennumerated generations !

These, sirs,—these are a few of the many evils that result from the want of a federal government. Our internal constitutions may make us happy at home, but nothing short of a federal one can render us safe or respectable abroad. Let us not, however, in our eagerness to attain the one, forget to preserve the other inviolate ; for better is distress abroad, than tyranny and anarchy at home. A precious deposit is given into our keeping : we hold in our hands the fate of future generations. While we acknowledge that no government can exist, without confidence in the governing power, let us also remember, that none can remain free, where that confidence is incautiously bestowed.

How, gentlemen, shall I apologize for having obtruded this serious address upon the gaieties of this happy day ?—I told you, and told you truly, that I was ill qualified to play the holiday orator : and I might have added, that the joy of this day is ever attended, in my mind, with a thousand mingled emotions. Reflection on the past, brings to memory a variety of tender and interesting events ; while hope and fear, anxiety and pleasure, alternately possess me, when I endeavour to pierce the veil of futurity. But never, never before,

have they pressed upon me with the weight they do at present. I feel that some change is necessary: and yet I dread, lest the demon of jealousy should prevent such change: or the restless spirit of innovation, should carry us beyond what is necessary. I look round for aid;—I see in you a band of patriots—the supporters of your country's rights: I feel myself indebted to you for the freedom we enjoy: I know, that your emotions cannot be different from my own; and I strive, by giving you the same views on these important subjects, to unite your efforts in the common cause. Let us, then, preserve pure and perfect, those principles of friendship for each other, of love for our country, of respect for the union, which supported us in our past difficulties. Let us reject the trammels of party; and as far as our efforts will go, call every man to the post, his virtues and abilities entitle him to occupy. Let us watch with vigilant attention over the conduct of those in power; but let us not, with coward caution, restrain their efforts to be useful: and let us implore that omnipotent being who gave us strength and wisdom in the hour of danger, to direct our great council to that happy mean, which may afford us respect and security abroad, and peace, liberty, and prosperity at home.

After the oration was pronounced, colonel Morgan Lewis addressed the newly admitted members, as follows:

Gentlemen,

PREVIOUS to your reception into this society, permit us to call to your remembrance the circumstances which gave birth to your institution, and the principal objects which its founders had in view: the reflection will not fail to add to the transports which each patriotic bosom must feel on this auspicious day.

At the close of that war, which emancipated the inhabitants of this vast continent, and confirmed a revolution greater than any the world had ever been presented with, a gallant band of patriots, who, for eight years, had lived together in habits of the strictest friendship—together borne the numerous hardships incident to the soldier's life—together braved the various dangers of the field—together fought, bled, and conquered, saw themselves on the eve of separation, and could not bear the thought that it should be forever. --A general anxiety took place, which was heightened by the reflection that new plans of life, new connexions, were to be formed, by men who had devoted themselves to their country, spent their fortunes in her service, and were about to return to the peaceful walks of private life; --many of them perfectly destitute, and all without the well earned wages of their toils. The families too of many a departed brother, whom the adverse fortunes of the field had snatched untimely from them, claimed their assistance---under these impressions this institution was formed, friendship the motive, and the great object charity; cherished however, by this sentiment, that, in order to preserve that freedom we had fought for, it became essential to maintain that union which had acquired it. Envy, notwithstanding, hath sometimes ascribed to us improper views; and a too quick apprehension of danger, prompted by lively imaginations, hath frequently suggested the possibility, that a set of men who had fought the battles of their country, and obtained her--an honourable and advantageous peace, were, at the instant of resigning their arms and retiring from the field, meditating combinations dangerous to that liberty which they themselves had secured.

For vindication from such misre-

presentations we appeal to facts, our own hearts bearing honest testimony to the rectitude of our intentions.

Our assuming the name of an illustrious Roman, whose virtues we wish to emulate, and our having pursued, as far as possible, his noble example, must convince the candid of the sincerity of our professions, when we declare, that our designs are pure and disinterested. Nor have we a wish to confine the election of our members to the military line alone; the choice of this day affords a proof to the world, that distinguished merit, whether it has shone conspicuous in the cabinet or field, hath an equal claim to the honours of our society.

Accept, gentlemen, our warmest congratulations on the joyful occasion of our present meeting:—may each return of this happy day revive in our minds the memory of past achievements—may it enliven our former friendships—may it animate our future exertions in the cause of our country—and may it inspire our national councils with wisdom and patriotism, that our posterity, to the latest period of time, may have reason to respect it as the greatest blessing which heaven ever poured in mercy on them.



Conjectures concerning wind and water-spouts, tornados and hurricanes. Communicated by Dr. John Perkins, of Boston, to John Morgan, M. D. of Philadelphia, professor of the theory and practice of physic; and F. R. S. London, &c.

WITH respect to water-spouts, what I am about to consider is, whether water ascends or descends in these bodies? A question which, it is reasonable to think, should be determined by facts, and the nature of things; and concerning which, if we wish to attain to any certainty, we must be careful not to be misled by

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such appearances and imaginations, as have hitherto commanded the general belief.

Agreeable to this method of enquiry, I shall in the first place produce the observations of three or four persons, in whom I can confide for simplicity and honesty of intention.

The first is that of capt. Melling, formerly of Boston, who informed me that in a voyage from our West India islands, in the month of August, in a warm day, just at evening, a spout fell close by the vessel, and, in two or three seconds of time, came across the stern, where he then was. A flood of water, as he expressed it, poured upon him and almost beat him down; so that he was obliged to lay hold of what was nearest to him, to prevent being washed overboard, which in his fright he was apprehensive of. But the spout immediately passed off with a roaring noise into the sea. I asked him if he tasted the water? Taste it, said he! I could not help tasting it, it ran into my mouth, nose, eyes, and ears. Was it then fresh or salt? As fresh, said he, as ever I tasted spring water in my life.

The next account I had, was from captain John Wakefield, also of Boston, which was, that being just within the straits of Gibraltar, a spout fell close by his ship, with a great roaring, which he heard as he was sitting in the cabin, the men upon deck immediately crying out for him to come up, which he instantly did, and saw it travelling away before the ship, so near that he plainly saw the water descend. His men assured him that it did so from the beginning. He told me the wind was very small, during the operation of it.

Captain John Howland, of same town, told me, that in passing the calm latitudes, a spout fell so near, that he evidently saw the water de-

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scend, very contrary to his former opinion, concerning these bodies.

Mr. Samuel Spring, of the same town, told me that in a voyage from India, in passing the straits Malacca, a spout fell by estimation about fifty yards from their ship; the appearance of which was that of a column of water; or rather a stream of almost contiguous drops from the cloud down into the sea, making a great froth in the place like water falling among rocks, as he expressed it. He said it was extremely plain that the water descended. One of the ship's crew was with him when he gave me this account, and confirmed it.

Many other accounts I have had, from those who have seen spouts, but so indeterminate as not to be worth much notice; I therefore content myself with the above, which speak for themselves.

In the next place, I shall make a few remarks on Mr. Stuart's figures of spouts, which he took in the Mediterranean, as they are to be seen in the philosophical transactions of London, Le Motte's abridgement; particularly on the pointing to the place of spattering in the water, and the great roar that attends the operation of a large spout; the bush about the foot or base of a great spout; the break or partition in the trunk of it at the top of the bush: and the pillar-like appearance within the bush.

First, I shall endeavour to give some idea of the nature and cause of the pointing, by the external and apparent means that nature uses in the production of a spout; for as to the intimate operations of nature, our faculties cannot reach them. Two or three observations, I suppose, will readily be granted, and shorten my work.

One is, that those places, where the lower region of air is drawn away on one or both sides, either by the heat of neighbouring continents, or in

the calm latitudes, from which it passes away into, and for the supply of the equatorial expanse, are likely to be the places most liable to spouts.

In the next place, I expect it will be granted, that the air is much colder in the upper regions, and of consequence specifically heavier, than that near the surface, by which, when there are little or no differing motions of the air (i.e. winds) in or about the region of the clouds, particular spots of air and vapour in the cloud, may be disposed to descend, and, when so, will take very aptly a particular channel downwards. These things being granted, what is of a like kind will readily be so disposed too, as, when the atmosphere is full of vapours, condensing into clouds, this condensation may be quicker in one place than in another, which, by the acquired cold, will become more weighty, and press most in a particular point. Thus it may descend through the more rarefied and yielding subjacent region, the first drops piercing and making a channel, may facilitate the descent of the vapour, till it puts on what Stuart calls a sword-like appearance. The agitation, caused by descending, will accelerate condensation, which, together with the drops passing through the vapour, in this channel, may, at every stop in the passage, be wasting the vapour, by taking it up into lesser masses of water, till it ends in a point, which it will in this case naturally do, because the swiftest motion down is in the centre of the pointing body.

Such a spout may increase, so as to form masses of water, the substance of the cloud, all obstacles removed, passing down in greater abundance, and still more swiftly condensing; or it may presently cease, when it has but just appeared, or, instead of this, make, as it were, several attempts for completing a spout, the vapour

teat advancing and retiring alternately, but which finally fail, without producing effect. Thus it has done, as it seems, when the cloud has not had sufficient supplies for it to succeed in a complete and opaque spout. Such are the appearances of *mr. Stuart's* figures, &c. The obliquity of the pointing is owing to the course of the air, as the bend is to two different ones at different heights.

The next thing proposed to be considered was the great roar that attends a complete spout while it lasts: and it is the same as that in cataracts or falls of water from great eminences. This kind of roar could not exist in any way of ascent, being very different from that of a whirlwind, which is no other than that of any other strong wind.

Mr. Stuart's figures of the great spouts are drawn with the appearance of a bush round their bases: the case is such, that great falls of waters must make a proportionable spray; so that the appearance is natural, and indeed a necessary consequence. It rises up from the foot of the spout and falls back in a parabolic manner into the sea. As was said of the roar just now, so it may be said of this, that it could not have existed in any conceivable way of ascent; while on the contrary it was perfectly agreeable to nature on the principle of descent. It continues the whole time of a large spout, increasing and diminishing as that does.

The appearance of a break or partition in the trunk of the spout, at the top of the bush, is a very curious phenomenon: it is not real but apparent, and could not have happened without the bush; it being caused by a refraction of rays from the drops that constitute the top of the bush; whence a divergency and so much loss of vision.

In great spouts there is also a pillar-like appearance, being a part of

the trunk within the bush and by another refraction, through the side of the bush, by which it appears much bigger than it is, and limited in altitude by the break. The three last are agreeable to the laws of optics; and all the five particulars being attendants on the greater or the smaller spouts, are to me undeniable evidences of the universal descent of waters in these bodies. I pass from *mr. Stuart's* figures to that of *mr. Maine*, which is not less curious.

Mr. Maine, in the same philosophical transactions, has given us the figure of a spout that fell at *Topsham*, near *Exeter*. He has depicted it in the act of striking a boat as it passed a creek: from the bottom of which he has drawn a rebound of the whole body of the spout projected from it to a large distance; evidently proving the descent: and which, while he is arguing for the ascent, it would have much become him to have accounted for, and to have shewn how it agreed with the doctrine of ascent. The spout proceeding, passed on to the land, and brake off the limbs of a tree, beat off the thatch of a house, and did perhaps various other damage; but we hear nothing of its carrying up any of the light substances, and dropping them at great distances, far from any environs of the place, which it would most certainly have done, had there been a whirlwind, or any supernal suction employed in the operation.

The supernal suction which some have mentioned, I suppose I may pass over without more than the bare mention of it: but whirlwinds we know there are frequently, and some of considerable strength; so that it being the general opinion that spouts are formed by them, it may not be amiss to examine a little what force they may reasonably be allowed to have, and the limits of it.

Their genuine cause, supposing

them to be natural productions, is no other than the ascent of the heated and consequently higher air, at the surface, into, or through the colder and consequently heavier regions of the atmosphere above: and in proportion to the different degrees of heat in one of these, and cold in the other, may the strength of these be, but no more.

Dr. Arbuthnot, in his treatise on the air, tells us, that the rarefaction of the air in the hottest day in summer, renders it but one tenth lighter than that of the coldest in winter, or in words to this purpose, if I remember right, for I have not his book by me. Supposing then the upper region the same at all times, as the lower one in winter, when a whirlwind happens, it cannot have any greater force than the weight of one tenth of the atmosphere, and considering the resistance of its rising which it must encounter, and the friction by the way, not so much; by which the strength may not be equal to three feet of water. It is undoubtedly nine parts in ten too weak to make a vacuum, and having a column of water two miles high to support, besides the additional necessity of still more force to drive it swiftly up, would require an atmosphere two thousand times more weighty than ours, to raise water to the clouds.

Mr. Stuart says he saw the water ascend in the heart of a spout; which seem to have been an unlucky expression. The bodies of large spouts are too gross and opaque for any one to see to the centre of them; and no one has ever pretended to have seen water ascend in the small ones. His imagination therefore must have been too strong for any one to confide in, so far as he was prejudiced; and at least one of his views was to prove the ascent; which, had he understood nature in a tolerable degree, he would have renounced.

That there is a gyrating appearance in the great spouts, seems to have been matter of observation; nor is there any improbability in the thing. As air passing up in whirlwinds, so water, or air, passing down may gyrate; and no doubt it does. The case is, that some have imagined the gyration to have been upwards: but the appearance of gyration up or down may easily deceive, as any one may be convinced by observing the swift turning of artificial screws, in which the direction will appear as the person is disposed to fancy it.

We are told the Chinese sailors' answer to the question, what are you afraid of in spouts? is, that they may break in their decks. Which shews they take them to be descents: and their knowledge is from observation and experience.

I conclude with one short remark, viz. That to believe water ascends in these bodies, to the region of the clouds, is virtually to admit of real and essential miracle, without sufficient proof: and contrary to every idea we can form, of a divinely wise intention.

Tornados and hurricanes I take to be of the same general nature, altho' differing in some circumstances and appearances.

By the term tornado, or wind-spout, I mean a violent wind which has been observed in these northern colonies a few times since they were discovered and settled by our people. But perhaps no part of the terraqueous globe is entirely free from something of the like kind, as the atmosphere is every where liable to similar commotions.

The Spanish term of tornado, seems to have been chiefly used for a violent storm at sea, of larger extent than what I am about to explain, which is of a more contracted nature, and confined to a narrow sphere of action; so that it requires a particular

and significant name, such as wind-spout, till a more suitable one is found for it.

Description of one. It begins of a sudden; more or less of clouds having been drawn together, a spout of wind coming from it strikes the ground in a round spot of a few rods or perches diameter, with a prone direction, in the course of the wind of the day, and proceeds thus half a mile or a mile. The proneness of its descent makes it rebound from the earth, throwing such things as are moveable, before it, but some sideways from it. A vapour, mist or rain descends with it, by which the path of it is marked and wet.

I shall produce the instance of that at Leicester, a town about fifty miles from Boston, a few years since. which being more violent than usual, may give some idea of the thing.

It happened in the month of July, on a hot day, about four o'clock, P. M. a few clouds having gathered westward and coming over head, a sudden motion of their running together in a point being observed, immediately a spout of wind struck the ground at the western end of a house, and instantly carried it away, with a negro fellow in it, who was afterwards found dead in the path of it. Two men and a woman, by the breach of the floor, fell into the cellar; one man was driven forcibly up into the chimney-corner. These were preserved, though much bruised; they were wet with a vapour or mist, as were the remains of the floor and the whole path of the spout.

This wind raised boards, timbers, &c. and carried them before it. A joist was found on one end driven near three feet into the ground. I imagine the spout took it in its elevated state and drove it forcibly down. By what I can learn of its procedure, it continued but three or four seconds of time in a place, pass-

ing along with the celerity of a middling wind, constantly declining in strength till it ceased.

There seems to have been such a gust as this at cape Cod, about forty years ago, of which I received an account from two men who lived in the neighbourhood of the place. It came on of a sudden, and was so violent that it threw down a young woman who happened to be in the way of it; she was forced to lay hold on the bushes which happened to be within her reach, to prevent her being carried away by it. It passed a pond of water, and the people wondered it did not suck up the water, as they conceived it to be a water-spout; but it did not. The young woman was however wet with the vapour that accompanied it.

Of hurricanes, particularly those of the West India Islands.

To account satisfactorily for these convulsions of our atmosphere, requires a greater number and more circumstantial observations than we are at present furnished with; so that all that can at present be said of their origin and causes, must be very conjectural. However, since an attempt to explain them may give occasion to further and more exact observations, I shall proceed to offer my present thoughts concerning them.

I believe those of the West-India islands to be owing to some occasional obstruction in the usual and natural procedure of the equatorial trade. This I conjecture from the more than usual preceding calms. In the natural course of this trade, the air rises up in the line, and passes off towards the poles, and, in the more contracted degrees of the greater latitudes, proves the course of their western trades: So that could this ascent be prevented through the whole circle of that zone, there would be no more

westerly winds in these latitudes than any others.

Over-violent rains and cold naturally tend to check the ascent of air out of this circle, rather making it descend. And as there are annual rains in the equator over against those islands, and in some years more than others, it is easy to conceive such an effect, and the consequences. Great clouds and over-much vapour generate cold and weight, while at the same time the rains are beating down the air; and as these prevent the rising of the air out of the line, so they hinder its usual progress to it from the tropics on both sides. Thus calms must take place; by which the natives used to predict approaching hurricanes, without understanding the reason of the thing.

Much of calms in the inter-tropical climates cause rarefactions, and ascents of air into the upper regions, instead of its being carried to the line to be disposed of in the grand circulation of the atmosphere; this will be the case more especially among the islands, which increase the heat of the atmosphere. Then by these ascents there will be accumulations of air above, which, becoming cold in the higher regions, will acquire a greater specific weight, and be disposed to descend on the first giving way of the more rarefied and yielding subjacent region; and this will be the case when there happens not to be sufficient motions of air in the middle region to keep smooth and even the strata of the more and the less rarefied regions; and so prevent particular portions and places from bending downwards; and it is this alone that does prevent it. By a failure in this, a descent once begun, the consequences cannot be prevented. The heavy quantity above will continue to descend till all the upper cold regions are exonerated to many hundreds of miles round; and all their

contents shifted into the place of the rarefied and lighter air below.

Such are my ideas of the causes and operations of a hurricane in those climates. I have only to add here, that the rains in these violent storms are, as I think, a strong confirmation of the doctrine of descent; as they are in that kind of hurricane called by sailors the ox's eye, on the coast of Guinea; and the like happens under various names in different parts of our globe. Even the wind in our thunder-gusts is from descent; the air in the cloud being rendered dense and weighty, descends, and flows in the direction of the wind of the time, and with the more violence, by the warm air at the surface giving way to it. These are sometimes strong, but seldom attended with danger or damage.

What objections may be raised against these opinions, shall be candidly attended to; in the mean time, there is one objection that must be obviated, the argument being somewhat interested in it. It is as follows.

Having expressed my opinion that hurricanes and tornados or wind spouts have the same general nature, while we see a great disparity in their magnitude and procedure; some explanation seems necessary to prevent mistakes; I think a little consideration of the place, climate, and circumstances, may remove the difficulty.

The earth is an oblate spheroid, its diameter many miles greater at the equator than at the poles, caused by its diurnal centrifugal force. If this then has so great an effect on terraqueous matter, it cannot have less on our air, but if any difference, rather more: especially if we consider, that the atmosphere makes a larger diameter, and yet revolves in the same time, so that its centrifugal force must be proportionably greater. The diurnal motion of the earth tends to throw a vast surplus of air on the equator, by

which there is probably more air between the tropics than on the rest of the globe. But this is a matter of conjecture, not to be perceived by any sort of pressure, any more than by the barometer, for reasons, obvious to those conversant in the nature and effect of the several principles. However, it might not be amiss to observe whether there be any difference in the height of the mercury before any of these storms. But to return.

Although the air in the inter-tropical latitudes, is in general lighter than in the remote ones, yet when the upper air has obtained a passage downward, it being vast in quantity, and occupying great space, it will belong in accelerating and passing down. The passage is long, so that it will gain a great deal of the force we find it has, by the length of descent. Neither will the middle region be disposed to shut up without a brisk wind in it, before the whole, even to remote regions, is discharged through the large hiatus, as before mentioned, and now repeated, to account for the duration and extent of these otherwise wonderful winds, with such unrelenting violence.

Far different is the case of the high altitude tornados in their circumstances and their manner, although agreeing in their general nature. The centrifugal force here has extremely little effect, unless to cast the atmosphere towards the equator, instead of rising or increasing its quantity over any given place on either side. Besides, there is the attraction of the sun, moon, and all the other planets for ever within the tropics attracting the atmosphere that way; and lessening the height of the high latitude atmosphere, which, therefore, may be supposed not a fourth so high from the surface as that.

Since then the atmosphere is vastly less in height, and also much less in quantity, than toward the line, the

descents must naturally be very different. Here are no accumulations aloft. The quantity ready for a discharge downward is vastly less, and the passage narrow and contracted; and by the almost constant motions of air, were there more supplies, it would soon shut up. Besides, there is little aptness to flow from surrounding regions, by reason of the smallness of their depth, &c. And yet so great is the specific weight of what descends, that the first assault has been known to equal the greatest violence of the proper hurricanes in their most powerful moments.



From the Pennsylvania Magazine.

CONSOLATION for the OLD BACHELOR.

MR. AITKEN,

YOUR Old Bachelor having in a very picturesque and pathetic manner set forth the miseries of his solitary situation, severely reproaching himself for not having married in his younger days; I would fain alleviate his distress, by shewing, that it is possible, in the nature of things, that he might have been as unhappy, even in the desirable matrimonial state.

I am a tradesman in this city, and, by unremitted industry, am enabled, from the profits of my business, to maintain a wife and one daughter, now six years old, very comfortably, and to lay up a little at the year's end, against a rainy day.

My good wife had long teased me, to take her to New York, in order to visit Mrs. Snip, the lady of a wealthy taylor in that city, and her cousin; from whom she had received many pressing invitations. This jaunt had been the daily subject of discussion at breakfast, dinner, and supper, for above a month before the

time fixed upon for putting it into execution. As our daughter Jenny could by no means be left at home, many and great were the preparations to equip miss and her mother, too, for this important journey; and yet, as my wife assured me, there was nothing provided, but what was absolutely necessary, and which we could not possibly do without—my purse sweat at every pore—at length the long expected day arrived, preceded by a very restless night; for as my wife could not sleep for thinking on the approaching jaunt, neither would she suffer me to repose in quiet—if I happened, through weariness, to fall into a slumber, she soon roused me again by some unreasonable question or remark; frequently asking me whether I was sure the apprentice had greased the chair wheels, and seen that the harness was clean and in good order; often observing, how surprised her cousin Snip would be to see us, and as often wondering how poor dear miss Jenny would bear the fatigues of the journey. Thus passed the night away in delightful discourse—if that can properly be called a discourse, wherein my wife said all that was said; my replies never amounting to more than the monosyllables yes or no, uttered between sleeping and waking.

No sooner was it fair day-light, but up started my notable wife, and soon roused the whole family. The little trunk was stuffed with baggage even to bursting, and tied behind the chair, and the chair-box moreover crammed with trumpery—miss Jenny was dressed, and breakfast eaten in haste. The old negro wench was called in, and the charge of the house delivered to her care—the two apprentices and the hired maid received many wholesome instructions and cautions for their conduct during our absence—all which they most libe-

rally promised to observe. I waited with infinite patience the settlement of these preliminaries. At length, however, we set off, and turning the first corner, lost sight of our habitation, with great regret on my part, and no less joy on the part of my wife and miss Jenny. When we got to Poole's bridge, there happened to be a great concourse of waggons, carts, &c. so that we could not pass for some time: miss Jenny was frightened—my wife very uneasy and impatient—wondered I did not call out to those impudent carters, to make way for us, observing “that I had not the spirit of a louse—that I let every body impose upon me.” Having at last got through this difficulty, we proceeded on our way without obstruction—my wife in good humour again—miss Jenny in high spirits. At Kensington fresh troubles arose, Bless me, miss Jenny, says my wife, where is the little band box?—“I don't know, mamma—the last time I saw it was on the table in your room.” What's to be done! the band-box is left behind—it contains miss Jenny's new wire cap—there is no possibility of doing without it—as well no New York, as no wire cap—there is no alternative, we must e'en go back for it. Teized and mortified as I was, my good wife undertook to administer consolation, by observing, “that it was my place to see that every thing was put in the chair that ought to be—that there was no dependence upon me for any thing—that unless she looked after every thing herself, she was sure to find something neglected—and that she saw plainly, I undertook this journey with an ill will, merely because she had set her heart upon it.” Silent patience was my only remedy—An hour and a half restored to us this valuable requisite, the wire cap, and brought us back to the place where the loss of it was first discovered.

After numberless difficulties and unparalleled dangers occasioned by stumps, ruts, and tremendous bridges, we at length reached Shammenny ferry. But how to cross it, was the difficulty—my wife protested, that neither she nor Jenny should go over in the boat with the horse. I assured her in the strongest terms, there was not the least danger—that the horse was as quiet as a dog; as well he might be, after tugging such a load. But the most forcible argument was, that she must go that way, or not at all, as there was no other boat to be had. Thus persuaded, she ventured in—The flies were troublesome; the horse kicked—my wife was in panics—Miss Jenny in tears. Ditto at Trenton ferry. As we started very early, and the days were long, we reached Trenton by two o'clock. Here we dined—my wife found fault with every thing; ate a very hearty dinner—declaring, all the time, there was nothing fit to eat. Miss Jenny crying out with the tooth-ach—her mother making sad lamentations—all my fault, because I did not make the glazier replace the broken pane of glass in her chamber window—N. B. I had sent twice for him, and he promised to come; but he was not so good as his word. After dinner, proceeded on our journey. My wife in good humour. Miss Jenny's tooth-ach much better. Various chat. I acknowledge every thing my wife says, for fear of discomposing her. We arrive in good time at Princeton. My wife and daughter admire the college—refresh ourselves with coffee—go to bed early, in order to be up by times for next day's expedition.

We embarked once more in tolerable good humour, and proceeded happily on, till we came to Rocky Hill. Here my wife's fears and terrors returned with great force. I drove as carefully as possible; but coming to

a place where one of the wheels must unavoidably go over the end of a small rock, my wife, in a great panic, seized hold of one of the reins, which happening to be the wrong one, she pulled the horse so as to force the wheel much higher up the rock than it would otherwise have gone—and overset the chair. We were all tumbled hickledy pickledy into the dirt. Miss Jenny's face all bloody—the woods echo with her cries; my wife in a fainting fit—and I in great misery, secretly and devoutly wishing cousin Snip at the d——. Matters begin to mend. My wife recovers—Miss Jenny has only received a small scratch in her cheek.—The horse stands quite still, and none of the harness is broke.—Matters grew worse again—The twine, which tied the band-box, had broke in the fall; and the afore said wire-cap was found soaking in a nasty mud-puddle. Great lamentation over the wire cap—all my fault, because I did not tie it better. No remedy—no wire caps to be bought at Rocky Hill. At night, my wife discovered a small bruise upon her hip—was apprehensive it might mortify—did not know but the bone was broke or splintered—many instances of mortifications arising from small injuries. After passing, unhurt, thro' the imminent dangers of Passayek and Hackensack rivers, and the yet more dreadful horrors of Powles Hook ferry, we arrived, on the third day, at cousin Snip's, in the city of New York.

Here we tarried a tedious week. My wife spent me a great deal of money in purchasing a hundred useless articles, which we could not possibly do without; and every night, when we went to bed, fatigued me with encomiums on her cousin Snip, leading to a history of the grandeur of her family, and concluding with reproaches thrown at me

for not treating her with as much homage and respect as I ought. On the seventh day, however, my wife and cousin Snip had a very warm debate, respecting the comparative elegancies and advantages of the cities of New York and Philadelphia. The dispute ran very high, and many aggravating words passed between the two advocates. The next morning, my wife declared that my business absolutely required my attendance at home, and that it was not possible for us to stay any longer. After much ceremonious complaisance, in which my wife was by no means exceeded, we left the famous city of New York, and I with great satisfaction looked forward to the wishful period of our safe arrival in Water-street. But this blessing was not so easily to be purchased. Left I should seem tedious, however, I shall not recount the adventures of our return—how we were caught in a thunder gust—how our horse tired, by which we were benighted above three miles from our stage—how my wife's panics returned—how miss Jenny howled—and how very miserable I became. Sufficient be it to say, that after many distressing disasters, after much vexation and trouble, we at length arrived at our own door.

No sooner had we entered the house, but we were informed that one of our apprentices had gone off with the hired maid, no body knew where—the old negro wench had got drunk—fallen into the fire—and burned out one of her eyes,—and my wife's best china bowl was broken to pieces. My wife's usual ingenuity contrived to throw the blame of all these misfortunes upon me. As this was a consolation to which I had been long accustomed, in all untoward cases, I had recourse to my usual remedy, to wit, silence and patience. And after sincerely praying, that I might never see cousin Snip again,

I sat down industriously to my trade; endeavouring to retrieve my manifold losses.

This is only a miniature picture in the decorations of the married state, which I hold up to the view of your old bachelor in hopes it may tend to abate his choler, and reconcile him in some degree to a single life.

If this opiate should not be sufficient to give him some ease and comfort, I may, perhaps, hereafter administer a stronger dose: or rather, to resume my former metaphor, shall send him a picture of the married state more at length, and taken from the life.

Philadelphia, June 1775. A. B.



Observations on the growth of trees downwards; concluded from page 42.

THE first appearance of vegetation among trees here, is the flowing of the sap in the sugar maple. This begins with the frosty mornings, in the month of February. These hoar frosts never appear but when the air is moist; and it is invariably certain, that the sap ceases to flow, when the wind is at north-west, and the air dry, be the state of the earth, as to moisture or frost, as it may. From hence it appears, that the sap is extracted from the air, even before the leaf is expanded, and not from the earth, as is generally supposed.

The next appearance of vegetation, is the swelling of the bud, in the scarlet maple; and in this, as in all other trees, it is to my purpose to observe, that the uppermost buds always swell first, and its beautiful blossoms are seen earliest to unfold on the topmost boughs. This cannot depend on a sap, derived from the root; for, in that case, the lowermost should have unfolded first.

The husbandmen of New Jersey, upon those lands which do not produce oak-timber sufficient for fencing, have the bark from the pine trees in the latter part of the winter; and, in the spring, the turpentine running down over that part of the tree which has been barked, fills the pores, and preserving it against the water, renders the pine a very durable post for fencing. The turpentine, as I conceive, being collected from the air, descends from the top of the tree. This practice, lately introduced, deserves attention, not only as an argument in this question, but as an important lesson of instruction to those who live on pine lands.

The experiments made on fruit trees, by extending their branches into green-houses, while the roots remain in the ground, need not be repeated. They are better known than understood; and can only be accounted for, by supposing that their nourishment is derived from the air. Of this the following experiment may be a proof.

A branch of the maple being separated from the tree, and the lower end sealed, placed in any part of the tree, will bloom as soon as any of the adjoining branches, not separated from the tree, will do. The buds of trees, deriving their nourishment from the air, send down their fibres between the bark of the tree and the former year's growth of wood, and lay an additional wood over the former growth. It is upon this principle alone, that the growth of inoculations can be accounted for; and it is clear and plain, that every bud has its own pith, perfectly distinct from the tree it is attached to, and has also in itself every other part of a tree.

From a due consideration of what has been said, it will appear, that the growth of annual plants is the

expanding of the parts contained within their seeds as bulbs, and a production of other seeds and bulbs, perfectly distinct and unconnected with the former; but that the growth of trees, after the first year, is the expanding of buds, adhering to the former growth, and the fitting of other buds for future growth, attached to the tree, as well as forming of seeds, as annual plants do.

APPLICATION.

THE foregoing remarks were introduced into this work, with a view to apply the doctrine of the growth of trees and vegetables by accretion or an accession of particles to the buds and leaves, to a valuable agricultural purpose.

I could produce other proofs of the truth of the doctrine; but the foregoing are sufficient. I take it to be a fact that trees and vegetables receive most of their nutriment by the extreme parts of their branches; and hence we learn the reason, why land becomes rich much sooner, when certain vegetables grow upon it, than when it is suffered to lie barren.

The common practice among our farmers is to wear out a piece of land, and if they cannot manure it, let it lie vacant, till it acquires some fertility, merely by the spontaneous growth of weeds, or by other means, as rain, snow and frost. This is a great waste and loss to the farmer, who wants to improve all his land. The practice must proceed from great ignorance of the laws of vegetation, and marks the low state of agriculture in this country. It is directly the reverse of a proper method of managing land.

Land should always be covered with vegetables of some kind; but the crops should be frequently changed. Some kinds of grain impoverish land much sooner than others. Corn requires rich land, and always im-

pairs its fertility. Rye will grow on poor land many years, and without a great diminution of the crop.

This and other circumstances render it questionable, whether the manure or saline particles of land ever enter and compose a part of the vegetables; and whether the only purpose of manure is not to give a certain cement or a consistency to the earth, necessary to retain and support the roots. Thus, sand, which is too loose itself to support any plants, may, by being mixed with clay, become a good soil; and a pure clay is generally too hard and firm to admit the growth of plants; it should therefore be mixed with sand or light earth. Marine salt is the best of manure; hence, the fertility of Rhode Island and other parts of the sea shore, is preserved by spreading the field with sea weed. But I am told that marine salt, after producing great crops for a few years, waits and impoverishes the soil, so that it will produce nothing. It therefore becomes necessary to neglect this species of manure, after 6 or 7 years using it, on the same field, and give the land a coat of stable manure, or suffer it to acquire strength by the plants, grass, or weeds of a spontaneous growth. This is a proof that the vegetable manure is more agreeable to nature than the marine.

I believe that by a proper rotation of crops, any soil, tolerably firm and good, may be kept in what the farmers call *good heart*, without the application of manure. When the strength of land is, in some measure, exhausted, by crops of corn, wheat, flax, oats, &c. which should succeed each other, in the order that experience proves to be best, let it be laid down with clover, which will produce a good crop for hay, or good feed, and, at the same time, enrich the land. Whether the grass collects nitrous particles from the air, which

are communicated through the stalks and roots to the earth, I pretend not to determine—Certain it is, that if plants grow by an accretion of particles of water to the leaves and buds, which is the present hypothesis, then vegetation collects some property from the atmosphere, which, descending to the earth in the living blades, or by putrefaction, fertilizes the land. Leave the barren earth to itself, and but few weeds will spring up the first year to make this collection—A crop of clover will immediately answer the purpose—it will last but two or three years; but affords good mowing and pasture, and leaves the earth enriched. Turnips are also found to enrich land.

I would urge another method. When a field is impoverished, let it be ploughed six inches deeper than usual. The soil below the usual depth of ploughing, whatever be its colour, whether black or red, possesses a property which will produce good crops. Let the land be used thus for a few years, and the barren soil, which is turned from the surface, beneath the usual depth of ploughing, will acquire the same property. Thus by changing the surface of the field, the richness is preserved. These methods of keeping vegetation on land, and sometimes changing the surface by deep ploughing, will be of infinite use to farmers who have not marl, plaister of Paris, or plenty of other manure.

Noah Webster.



Letter concerning chimnies—containing some directions to prevent them from smoking.—Addressed to his excellency Benjamin Franklin, by Dr. Ruffon.

Philadelphia, Jan. 12, 1786.

SIR,

THE subject of smoky chimnies, on which I had the honour of conversing with you at your

own house last evening, is of so much importance to every individual, as well as to every private family, that too much light cannot be thrown upon it.

*A smoky house and a scolding wife,
Are two of the greatest ills in life.*

And however difficult it may be to remedy one of those ills, yet any advances we may be able to make towards removing the inconveniencies arising from the other, cannot fail to be favourably received by the public. As they are shortly to be favoured with your sentiments on that subject, possibly the following observations, which were in fact occasioned by necessity, and are the result of my own experience, may not be altogether undeserving of notice.

When I left London, and went to live in Devonshire, in the latter end of the year 1777, it happened to be my lot to dwell in an old mansion which had been recently modernised, and had undergone a thorough repair. But, as in most of the old houses in England, the chimnies, which were perhaps originally built for the purpose of burning wood, though they had been contracted in front, since coal fires came into general use, to the modern size, yet they were still, above, out of sight, extravagantly large. This method of building chimnies, may, perhaps, have answered well enough, while it was the custom to sit with the doors and windows open; but when the customs and manners of the people began to be more polished and refined—when building and architecture were improved—and they began to conceive the idea of making their chambers close, warm, and comfortable, these chimneys were found to smoke abominably, for want of a sufficient supply of air. This was exactly the case with the house in which I first lived, near Exeter, and I

was under the necessity of trying every expedient I could think of, to make it habitable.

The first thing I tried, was that method of contracting the chimnies by means of earthen pots, much in use in England, which are made on purpose, and which are put upon the tops of them; but this method by no means answered. I then thought of contracting them below: but as the method of contracting them in front to the size of a small coal fire grate, has an unsightly appearance, as it makes a disagreeable blowing like a furnace, and as it is the occasion of consuming a great deal of unnecessary fuel, the heat of which is immediately hurried up the chimney; I rejected this method, and determined to contract them above, a little out of sight. For this purpose, I threw an arch across, and also drew them in at the sides. This had some effect, but as this contraction was made rather suddenly, and the smoke, by striking against the corners that were thereby occasioned, was apt to recoil, by which means, some part of it was thrown out into the room; I determined to make the contraction more gradually, and therefore run it up at the back, where the depth of the chimney would admit of it, and also shelving or sloping in a conical kind of direction at the sides, as high as a man, standing upright, could conveniently reach, and by this means, brought the cavity within the space of about twelve by fourteen or sixteen inches, which I found sufficiently large to admit a boy to go up and down to sweep the chimnies. This method I found to succeed perfectly well, as to curing the chimnies of smoking, and it had this good effect of making the rooms considerably warmer; and as this experiment succeeded so well, since the only use of a chimney is to convey away the smoke, I determined to carry it still

farther, in order to ascertain with precision, how much space is absolutely necessary for that purpose, because all the rest that is shut up, must be so much gained in warmth. Accordingly, I laid a piece of slate across the remaining aperture, removable at pleasure, so as to contract the space above two thirds, leaving about three inches by twelve remaining open; but this space, except when the fire burnt remarkably clear, was scarcely sufficient to carry away the smoke. I therefore enlarged it to half the space, that is, to about six by seven or eight inches, which I found fully sufficient to carry away the smoke from the largest fires.

When I removed into the Bedford Circus in Exeter, though the house was modern, and almost perfectly new, yet the chimnies were large; in consequence of which almost every room of it smoked. My predecessor, who was the first inhabitant, had been at great expense in patent stoves, &c. but without effect; but by adopting the method I have described, I not only cured every chimney of smoking, but my house was remarked for being one of the warmest and most comfortable to live in, of any in that large and opulent city.

The house I now live in, in Philadelphia, I am told, has always had the character of being both cold and smoky; and I was convinced, as soon as I saw the rooms, and examined the chimnies, that it deserved that character; for, though the rooms were close, the chimnies were large: and we shall ever find, that if our chimnies are large, our rooms will be cold, even though they should be tolerably close and tight; because the constant rushing in of the cold air, at the cracks and crevices, and also at every opening of the door, will be sufficient to chill the air, as fast as it is heated, or to force the heated air up the chimney; but by contract-

ing the chimnies, I have cured it of both these defects. There was one remarkable circumstance attending the contraction of the chimney in the front parlour, which deserves to be attended to; which was, that before I applied the cast iron plate, which I made use of instead of slate, to diminish the space requisite for a chimney sweeper's boy to go up and down, the suction or draught of air was so great, that it was with difficulty I could shut the door of the room, inasmuch that I at first thought it was owing to a tightness of the hinges, which I imagined must be remedied, but upon applying the iron plate, by which the space was diminished one half, the door shut to with the greatest ease. This extraordinary pressure of the air upon the door of the room, or suction of the chimney, I take to be owing in some measure to the unusual height of the house.

Upon the whole, therefore, this fact seems clearly ascertained, viz. That the flue or size of the chimney, ought always to be proportioned to the tightness and closeness of the room: some air is undoubtedly necessary to be admitted into the room, in order to carry up the smoke, otherwise, as you justly observed, we might as well expect smoke to arise out of an exhausted receiver; but if the flue is very large, and the room is tight, either the smoke will not ascend, for want of a sufficient supply of air to fill this large chimney, in consequence of which your room will be in a constant smother, occasioned by the smoke—or else you must be under the necessity of admitting a greater quantity of air into your room, in order to afford this supply of air; the consequence of which will be, that the air of your room will be so frequently and so constantly changed, that the warm air, as fast as it is heated, will be

hurried away, with the smoke, up the chimney, while its place is supplied with cold air, and of course your room will be constantly cold.

One great advantage attending this method of curing smoky chimnies, is, that in the first place, it makes no awkward or untightly appearance, nothing being to be seen but what is usual to chimnies in common; and in the second place, that it is attended with very little expense, a few bricks and mortar, with a plate or covering to the aperture, and a little labour, being all that is requisite. But in this new country, where crops of houses may be expected to rise almost as quick as fields of corn, when the principles upon which chimnies ought to be constructed, are thoroughly understood, it is to be hoped, that not only this expense, small as it is, but that all the other inconveniencies we have been speaking of, will be avoided, by constructing the flues of the chimnies sufficiently small.

From your humble servant,
THOMAS RUSTON.



*The petition of the people called quakers,
of New England—To the general
assembly of the state of Rhode-Island:*

Respectfully sheweth,

THE religious society of the people called quakers, in New England, met together in their annual assembly on Rhode-Island, for the purpose of promoting the cause of religion, of piety, justice, and good order—

That being deeply affected with a sense of the uneasiness and dissatisfaction of the present time, and the calamity and distress which threaten the inhabitants of this country, without amendment and reformation: and being impressed with

a belief, that much now lies at the door of the civil authority, we are engaged, from a sense of religious duty, as well as of that allegiance we owe and acknowledge to the government under which we live, to address you on this occasion.

We trust it will not be judged improper, that we take this opportunity to lay before you our concern, and to recommend to your serious consideration, a repeal or amendment of such acts of assembly as are obviously inconsistent with that attention to the preservation of justice, integrity and uprightness, among the people, without which we can have no reasonable hope or confidence to ask for the blessings of peace and prosperity. Remembering that it is "righteousness exalteth a nation," and that civil authority, being ordained by God "a terror to evil doers, and praise to them that do well," is accountable to him for every act which is found to have a contrary operation upon the people.

Among other things, which have affected us with pain, that unrighteous and inhuman trade to Africa for slaves, and the cruel bondage consequent thereon, having long rested upon our minds with concern—we are especially engaged, at this time, to revive to your consideration, the case of that oppressed people, whom, from their situation, being incapacitated to plead their own cause, we have apprehended ourselves called upon by the father and protector of the whole family of mankind, in a sense of religious duty, to endeavour to assist and relieve.

There are many instances on record of the singular chastisements, which the supreme judge and ruler of the universe has appointed to nations who have notoriously deviated from the principles of justice and mercy; we conceive it would be highly becoming you, as legislators and fa-

thers of the people, as well as greatly conducive to your true peace and real honour, as individuals, seriously to consider how repugnant this traffic is to both; and, by a timely exertion of that authority entrusted to you, contribute your endeavours to prevent the sufferings of multitudes of that injured people, and avert from our land the judgments of him who has declared himself the avenger of the oppressed.

Being persuaded we address men generally convinced that this branch of commerce, and the treatment of the unhappy subjects of it, are contrary to the golden rule of doing as we would be done by; we intreat you seriously to consider, whether divine approbation can be expected, upon the exercise of civil authority, whilst individuals are permitted to prosecute this commerce in an oppression of their fellow-men, without restraint or disapprobation.

Under the influence of these considerations, and such others as the subject must naturally suggest, if weightily entered into, we are encouraged to hope, that this application, in behalf of that afflicted and oppressed part of our fellow-men, will meet your approbation. We therefore request, that you will take this case under serious consideration, and cause such a law to be enacted, as you in wisdom judge the most effectual to prevent that cruel and unjust trade, and finally to abolish that barbarous custom of holding mankind as slaves.

Signed, in and on behalf of our said meeting, by

WILLIAM ALMY, *clerk*
to the meeting this year.

Description of the white mountains in New Hampshire. By the rev. Jeremy Belknap.

THE white mountains, in the northern part of New Hampshire, have, from the earliest settlement of the country, attracted the attention of all sorts of persons. They are, undoubtedly, the highest lands in New England, and are discovered in clear weather by vessels coming on the eastern coast, before any other land; but, by reason of their bright appearance, are frequently mistaken for clouds. They are seen on shore, at the distance of sixty or eighty miles, on the south and south-east sides, and are said to be plainly visible in the neighbourhood of Quebec. The Indians had a superstitious veneration for them, as the habitation of invisible beings; and for this reason never ventured to ascend their summits, and always endeavoured to discourage every person who attempted it. From them, and the captives whom they formerly led to Canada, through the pass of these mountains, many fictions have been propagated through the country, which have in time swelled to marvellous and incredible stories; particularly, it has been reported that carbuncles have been seen at immense heights, and inaccessible spots, which gave a lustre in the night.

Those who have attempted to give an account of these mountains, have ascribed their brightness to shining rocks or white moss; and the highest summit has been represented as inaccessible, by reason of the extreme cold, which threatens to freeze the traveller in the midst of summer. They have also differed so widely from each other, and their accounts have been embellished with so many marvellous circumstances, and, on the whole, have been so unsatisfactory, that I have long wished for an

opportunity to visit these mountains in company with some gentlemen of a philosophical turn, furnished with proper instruments and materials for a full exploration of the phenomena that might occur. This pleasure I have in part enjoyed the present summer; and, though the roughness of the way, which prevented the use of convenient carriages, proved fatal to some of our instruments, and the almost continual cloudiness of the weather, while we were in that region, hindered us from making some observations, which we intended—yet, till a better account can be obtained, I flatter myself that what follows will prove more satisfactory than any which has yet been published or reported.

The white mountains are the highest part of a ridge which extends north-east and south-west to an unknown length. The area of their base is an irregular figure, somewhat resembling an isosceles triangle, whose longest extremity is towards the south, and whose whole circuit cannot be less than fifty miles. The number of summits within this area, cannot be ascertained at present, the country round them being a thick wilderness. On the north-west side, seven summits are in plain view; and this is the greatest number that can be seen at once from any station that is cleared of woods. Of these, four at least are bald. The highest of them is on the eastern side of the cluster, on which side we ascended, having first gained the height of land between the waters of Saco and Amarisogin rivers, to which there is a gradual ascent for twelve miles from the plains of Pigwacket. At this height of land, there is a meadow, which was formerly a beaver-pond, with a dam at each end. The water issues out of a mountain on its eastern side, in the form

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of springs, and meandering through the channels of the meadow, appears stagnant in the middle; but, dividing its course, at the south end of the meadow, it runs into Ellis river, a branch of Saco; and at the north end, into Peabody river, a branch of Amarisogin. From this meadow, there is an uninterrupted ascent, on a ridge between two deep gullies, to the highest summit.

The sides of the mountains are covered with spruce trees; the surface is composed of loose rocks covered with very long green moss, which reaches from rock to rock, and is in many places so thick and strong as to support a man's weight. This immense bed of moss spread over the surface of these mountains, serves as a sponge to retain the moisture brought by the clouds and vapours, which are continually rising and gathering round the mountains; the thick growth of spruce prevents the sun's rays from penetrating to exhale it; so that there is a constant supply of water to the numberless springs with which this region abounds, and an unceasing circulation of fluid, the process of which is highly entertaining to the spectator; for no sooner has a shower descended from the clouds, but the vapour rises from the leaves of the forest in innumerable little columns, which, having gained a certain height in the atmosphere, collect and converge towards the mountains, where they either fall again in showers, or are imbibed by the moss, and deposited in the crevices of the rocks, seeking their way to the hard stratum of granite which is impenetrable, and which guides them till they find vent in springs. The same liquid tribute is daily exhaled from the rivers, ponds, and low grounds, and attracted to the mountains, which, by these means, are always

D

replenished with water in every part.

The rocks, of which these mountains are composed, are in some parts slate, in others flint, but towards the top, a dark grey stone, which, when broken, shews specks of isinglass. On the bald parts of the mountains the stones are covered with a short grey moss, and, at the very summit, the moss is of a yellowish colour, and adheres firmly to the rock.

Eight of our company ascended the highest mountain on the twenty-fourth of July, and were six hours and fifty-one minutes in gaining the summit, deducting one hour and thirty-eight minutes for the necessary stops. The spruce and firs, as you ascend, grow shorter, till they degenerate to shrubs and bushes; then you meet with low vines bearing a red and a blue berry, and lastly a sort of grass called winter grass, mixed with the moss.

Having ascended the steepest precipice, you come to what is called the plain, where the ascent becomes gentle and easy. This plain is composed of rocks, covered with winter grass and moss, and looks like the surface of a dry pasture or common. In some openings between the rocks, you meet with water, in others dry gravel. The plain is an irregular figure, its area uncertain; but from its eastern edge to the foot of the sugar-loaf, is upwards of a mile; on the western side it extends farther. The sugar-loaf is a pyramidal heap of loose grey rocks, not less than three hundred feet in perpendicular height, but the ascent is not so difficult, as the precipice below the plain. From this summit in clear weather is a noble view, extending to the ocean on the south-east; to the high lands on the west and north-west, which separate the waters of Connecti-

cut river from those of lake Champlain and St. Laurence; on the south it extends to Winnipiseogee lake, and the highlands southward of Pemigewasset river.

It happened unfortunately for our company, that a thick cloud covered the mountain almost the whole time that they were on it, so that some of the instruments, which with much labour they had carried up, were useless. In the barometer the mercury ranged at 22,6 inches; in forty-four degrees of heat by Fahrenheit's thermometer. It was our intention to have placed one of each of these instruments at the foot of the mountain, at the same time that others were carried to the top; but they were unhappily broken in the course of our journey, and the barometer which was carried to the summit, had suffered so much agitation that an allowance was necessary to be made in calculating the height of the mountain, which our ingenious companion, the rev. mr. Cutler, of Ipswich, estimates in round numbers at five thousand five hundred feet above the meadow, the meadow being three thousand five hundred feet above the level of the sea, and this seems to be as low an estimation as can be admitted. We intended to have made a geometrical mensuration of the altitude, but in one place where we attempted it, we could not obtain a base of sufficient length, and in another, where this inconvenience was removed, we were prevented by the almost continual obscurations of the mountains by clouds.

On every side of these mountains are many long winding gulches, beginning at the precipice below the plain, and deepening in the descent; they are from one hundred to one thousand feet deep, and perhaps more. In winter, the

snow driving with the north-west winds over the tops of the mountains, is lodged in these gullies, and forms a compact body which is not easily dissolved by the vernal sun. It is observed to lie longer on the south, than on the north-west sides; which is the case with most other hills in this part of the country. In one thousand seven hundred and seventy-four, some men who were at work on a road under the eastern side of the mountain, ascended to the summit on the 6th of June, and upon the south side found a body of snow 13 feet deep, and so hard as to bear them. The man from whom I had this account, and who had the direction of the work, ascended the mountain on the 19th of June, with some of the same party, and in the same spot the snow was five feet deep. On the 23d of July this year, we were assured by persons who live within plain view of the mountains, on the south side, at the distance of sixteen miles, that the snow had not been gone more than ten days. We were also credibly informed that two men, who attempted to ascend the mountain the first week of September, last year, found the bald top so covered with snow and ice, then newly made, that they could not gain the summit; but this does not happen every year so soon, for the mountain has been ascended so late as the first week in October, when no snow was upon it; and sometimes the first snows that come, dissolve before the winter sets in; but generally the mountains begin to be covered with snow and ice, either in the latter part of September, or the beginning of October, and it never wholly leaves them till July. During this period of nine or ten months, they exhibit more or less of that bright appearance, from which they are denominated white.

In the spring, when the snow is partly dissolved, they appear of a pale blue, streaked with white; and after it is wholly gone, at the distance of forty or sixty miles they are altogether of a pale blue, inclining to the colour of the sky; while viewed at the distance of only ten miles, they are of the grey colour of the rock, inclining to brown. These changes are observed by people who live within constant view of them; and from these facts and observations it may justly be concluded, that the whiteness of them is to be ascribed wholly to the snow and ice, and not to any other white substance, for in reality there is none. There are indeed in the summer months some streaks which appear brighter than other parts, but these, when viewed through a telescope, I have plainly discerned to be the enlightened edges or sides of the long deep gullies, and the dark parts the shaded sides of them; and in the course of a day, these spots may be seen to vary according to the position of the sun.

It may not be amiss to query here, if so great a quantity of snow is accumulated and remains on these mountains, may it not be supposed to add a keenness to the winds which blow over them? And how many more mountains may there be toward the north and west, whose hoary summits contain the like or greater bodies of snow and ice, some of which, at the remotest regions, may remain undissolved through the year? May we not then ascribe the piercing cold of our north-west winds to the infinite ranges of frozen mountains, rather than to the lakes and forests?

These immense heights which I have been describing, being copiously replenished with water, ex-

hibit a variety of beautiful cascades, some of which fall in a perpendicular sheet or spout; others are winding and narrow; others spread on the level surface of some wide rock, and then gush in cataracts over its edge. A romantic imagination may find full gratification amidst these rugged scenes, if its ardour be not checked by the fatigue of the approach. Three of the largest rivers in New England receive a great part of their waters from this region. Ammonoosuck and Israel rivers, two principal branches of Connecticut, fall from the western side of the mountains; Peabody river and another branch of Amaroosicogin from the north-eastern side; and almost the whole of Saco descends from the southern side. The declivities being very steep, cause this latter river to rise very suddenly in a time of rain, and as suddenly to subside.

On the western part of these mountains is a pass which in the narrowest place measures but twenty two feet between two perpendicular rocks. Here a road is constructing with great labour and expense, which is the shortest route to the upper Cohos or Connecticut river, and to that part of Canada which borders on the river St. Francis. At the height of this narrow pass, the river Saco takes its rise. A brook descends from the mountain, and meanders through a meadow which was formerly a beaver-pond, and is surrounded by steep, and, on one side, perpendicular rocks—a strikingly picturesque scene! the rivulet glides along the western side of the defile. (the eastern being formed into a road) and tributary streams augment its waters, one of which is called the Flume, from the near resemblance it bears to the flume of a mill. The pass between the mountains widens as you descend; but for eight or ten miles they are so near as only to leave room for the ri-

ver and its intervals. In the course of this descent you see at immense heights, and in spots perfectly inaccessible, several rocks, some of a whitish and some of a reddish hue, whose faces are polished by the continual trickling of water over them. These, when incruusted with ice, being open to the south and west, are capable, in the night, of reflecting the moon and star-beams to the wondering traveller, buried in the dark valley below; and these are sufficient by the help of imagination, to give rise to the fiction of carbuncles.

We found no stones of any higher quality than flint*; no limestone, though we tried the most likely with aqua fortis. It is said there is a part of the mountain where the magnetic needle refuses to traverse; this may contain rock ore, but our guide could not find the place. It is also said that a mineral, supposed to be lead ore, has been discovered on the eastern side. One of the springs which we met with in our ascent on that side, afforded a thick frothy scum and a saponaceous taste. All searches for subterranean treasures in these mountains, have as yet proved fruitless. The most certain riches which they yield, are the freshets which bring down the soil to the intervals below, and form a fine mould, producing corn, grain and herbage in the most luxuriant plenty.

September, 1784.



A new lecture upon eyes.

HERE, ladies and gentlemen, are a pair of eyes which belong to a brisk widow; their lan-

NOTE.

* Some specimens of rock-crystal have been found lately by other persons, but we did not hear of it till after our return.

guage is not common—they *dance* when there is hope; they *squint* when it is despair. A young gentleman who sought her smiles, received his answer from these eyes, for they *frowned* upon him—however it was said a judgment passed upon them, for they soon lost their clearness, and were obliged to have the assistance of *spectacles*; now they can frown upon no one, their light has been changed into darkness—and it is high time that they be closed for ever.

Here are two *black eyes*, which are the property of a very young lady—cruel eyes they have been—yet they always appear gentle; they are eloquent in love, but most eloquent in sorrow. Whenever a sad affecting tale is told, I have seen them shed a tear of real sympathy; which, though it dimmed their lustre, added much to their value.

Here are a maiden's *coaxing eyes*: these pretty tall-tales always give the tongue the lye; for whenever their fair mistress says, "*Ah go away!*" these little things always cry out "*Stay!*" Pray admire them, ladies and gentlemen; they are very small, which makes them appear very *roguish*.

Oh Lord! here are an old maid's pair of grey eyes: they don't know whether to laugh or cry—always peeping where they should not. These are the eyes *which see and do not perceive*—they are so very prone to mistakes, and always discern a fault in another, though they can never discover one in themselves: it is very remarkable, that these *large eyes* never close; in bed they are always *staring*—God knows for what—out of bed always prying here and there and every where; sometimes they *wink*, when poor Nancy puts a thing out of its place, and are always looking over the affairs of others—though they never *overlook* their faults.

These are *blue eyes*, which belong to an heiress; they were well enough formerly, and answered their purpose of *seeing*; but now they are altered quite. Vanity has been their ruin! they know not which way to turn—they look at every one with disdain, and frown upon all who stand before them.

These eyes they call the *die-away*; as they are constantly complaining the least touch in the world offends them; I never saw them gay in my life—but once, and that was because a *looking-glass* was in their way.

Here is *one eye*, which, having by an accident lost its partner, was under the necessity of keeping company with a glass one; but nature being offended with the imposition, seeing that her most delicate piece of work was imitated and abused, she very justly decreed that the mock eye should never be able to close.

Here are a pair of *wicked eyes*, which do great execution; they are always sure in their mark, and generally aim at young sparks: they look for game in the day time, and take their *rest* at night; they speak with *ogling*, and their language may be thus translated:—

A glance, or side look, the strongest exprellion for love; it is literally, construing it—*I prefer you before all the company*.

A leer or sly look—in answer to the common question—*Will you have me?* A young lady would blush, were she obliged to say *yes* or *no* in plain terms; but by the *leers*, she at once confesses, *I will*, without any offence to delicacy.

A languishing look implies a strong desire to attain whatever the eye is fixed on.

These, ladies and gentlemen, are their most usual *phrases*; from thence we may discover the significations of others.

Here are two eyes—I don't know what to call them; they are so *hazy* and *disagreeable*, that I believe the *Jew* in the play was thinking upon them, when he made his objection to one colour:

"Her eyes may be faith any colour but green."

With your leave we shall pass over them.

The more we're delighted, the less they are seen.



A new lecture on noses.

Ladies and gentlemen,

NOSES are the most necessary instruments that human nature has supplied us with. By the nose we can discern the sweet and foul; by the nose we can always *smell a rat*; and let me tell you, ladies and gentlemen, there are so many *rats* in this world, that it is a very fortunate thing to have a *nose* about us. Yet I remember, when I was taking a walk a few days ago, I should have been very happy had I left my nose at home till my return, for it told me 'a dull nauseous tale,' that a *sewer* was just opened, and consequently there was a great stench. But to proceed.

Here, ladies and gentlemen, is a *needle nose*; look at it—how sharp it is at the end—on this account it takes its name from a needle. It is very odd, ladies and gentlemen, but the mistress of this nose is a damn'd scold. I was once acquainted with a needle-nosed family, and they did nothing (at least in my presence) but quarrel with one another—To tell you the truth, I did nothing (when in their presence) but laugh at their silly altercations.

This is a very *long nose*, indeed, and of great disadvantage to the owner. The master and mistress never go to drink but this unmannerly thing

pops into the vessel before them, as much as to say to mouth, 'follow your nose.' There is a gentleman I know, whose nose answers this description, owing, I believe, to the many times it has been *pull'd*—and we never yet took a pot of porter together but his *long nose* saw the bottom of it.

This is the *fiery nose* which sir John Falstaff was such an enemy to—'a fellow might light a torch with it,' I never go near one of them, for fear I may be *burned*. It is worthy of consideration how all this *fire* gets into this nose; but the matter is soon resolved when we recollect that your *fiery-nosed* gentry are very fond of *drams*. Spirits are fire in themselves, which fire always flies up into the head, and comes out at the nose.

You may laugh at me, ladies and gentlemen; but here are a bundle of noses together. This is very rare, but it has *been* and *is*; and I have a curious story to tell you in respect to the master of these noses. One day he met a *long nose*, which was *in his way*, and the *bundle of noses* was *in the other's way*. To be sure, they both flared at each other, for neither ever saw the like; but the master of the long nose clapping his hand upon it, and moving it to one side, exclaimed, 'There, sir, you may pass on now; you are the *greater* man, and have the *majority*.'

This, ladies and gentlemen, is an *aquiline nose*, of no little repute among the Romans: they esteemed it a nose of sense and beauty, and very often called it *the Roman nose*. Pray examine it, ladies, and let the gentlemen whom you desire for partners, be masters of these noses. Indeed, I can't say that I would recommend them to wives; there is something too masculine in them, which belongs only to the other sex. What is a beauty with men is very often the contrary with women.

But here is a *nose* for ladies—a sweet pretty nose indeed!—and she knows it, that has it. Behold, how elegantly framed! exact in shape, and beautiful in form! The young lady to whom this nose belongs, is affable, and of an easy temper; I never knew her to *turn it up* in all my life.

No, that is the custom of this *cock'd-up nose*—a vile, disagreeable thing!—My friend Darby has described the perverseness and obliquity of his Kathleen by singing, 'The little gipsy *cock'd* her nose.' It is certainly the greatest sign of pride and self-sufficiency that I know. I remark the *cock'd up nose* is very fond of *noses*. 'Arrah, will you kiss me, my sweet Ally Croker?'—'No, no.'—'Arrah, will you marry me, sweet Ally Croker?'—'No, no, no, no, no, no.' It is not to be wondered at, then, that all these *cock'd up noses* are generally *old maids*.

Upon my word, here is a nose—a *broad nose*—that you may drive a coach and six horses through. These persons who have such *prodigious handles*, are reckoned very mischievous and spiteful; for to *swell the nostrils* is a sure sign of malice. All you, ladies and gentlemen, who own these *exorbitant noses*, pray be careful, every morning and evening, to rub them down, and in a little time you may bring them into some reasonable shape.

This is a *pug nose*—a mere nothing, I may say. You see that nature intended there should be a nose, and left a vacancy for it, but perhaps had not leisure to complete it: indeed, there's a substantial reason given for these *no-noses*; the owners have been so very often insolent and abusive, that when they had them in their full height of perfection, they *got them broke*; and, as my friend Paddy very fully expresses it, 'O' my conscience, *gained a loss*!'

This is a nose which is esteemed by

many—but I think there's *too much*, and shall say *very little* about it—as for these other *noses*, we may esteem them only as *signs*, to tell the travellers, here are *my heads*—that is all, for I am sure there is *nothing in them*. I would observe, that some people never had a nose—but as this is a *lecture upon noses*, I must not give you room to say that there was a *blunder in my title*.



A memoir on the distillation of perfumons, by mr. Isaac Bartram.

THE American philosophical society having proposed at one of their meetings in November last, that a trial should be made for drawing a spirit from the fermented juice of the perfumon, I was appointed to make the experiment.

The season being then so far advanced, I apprehended it was too late; but being still urged by the society to make the essay, I purchased about half a bushel of the fruit in the month of December, which was so much damaged by the frost and rain, that I almost despaired of success; the proper time for gathering it being in the month of October.

I however proceeded in the following manner.

I caused the perfumons to be well mashed, and put them in a five gallon keg, to which I added two gallons of water, and about two penny worth of yeast, in order to promote a fermentation. This being completed, I committed the whole to the still, and drew therefrom near half a gallon of proof spirit, of an agreeable flavour.

From the success of this experiment, I think it may be concluded, that the perfumon may be rendered very beneficial to those who have many of them growing on their plan-

tations, and that they are worthy of the public attention, as many advantages may be reaped from the cultivation of the trees: some of which I shall hint at in the course of this paper.

To those who would undertake to collect large quantities of this fruit for distillation, I would recommend the following process.

Let a number of empty hogsheds, in proportion to the quantity of fruit, be provided; take out one of the heads of each, and in the other let a hole be bored, at about four inches from the chimb, into which fix a plug, which may be occasionally taken out from the lower end, when the casks are fixed upon trussels, at a small distance from the ground. In these casks, over the holes, lay a number of small sticks, covered with straw, about two or three inches thick, to prevent the pulp from choking them.

Your hogsheds being thus prepared, fill one of them half full with persimons, which have been well mashed; add water until it arise within one third of the top; then cover the cask with the head that had been taken out, and let it stand about nine days; by this time the pulpy or seculent part of the fruit will be separated by the act of fermentation: you are then to draw off the liquor, by the hole in the bottom of the hogshhead, and put it in a tight cask, closely bunged up, to prevent a second fermentation, whereby your liquor would become acid, and be rendered unfit for the still.

Having thus extracted the more vinous parts from the first hogshhead, let as much water be added as before, which must be well stirred, and mixed with the pulp, thereby to procure the whole strength of the fruit.

A second hogshhead is then to be charged half full of fruit, well mashed as the first, and instead of pure water, fill it two thirds full with the second

extract of the first hogshhead, leaving it to ferment, as before directed. This fermentation being perfected, draw off the liquor, and let it be bunged up close. The third hogshhead is to be treated as the second, and in a like manner every succeeding cask. After you have in this manner converted all your fruit into a fermented liquor, let it be kept at least one month before it is distilled, if it can be preserved without danger of its becoming sour; for I have observed that vinous spirits, drawn from new fermented liquors are not equal in flavour to those which have been meliorated by age.

The persimon tree is of a quick growth, and yields great quantities of fruit in a few years after it is planted. The wood is hard, has a fine close grain, and may be applied to many mechanical purposes; it burns well, and its ashes contain a very large proportion of salts.

These trees grow spontaneously near all our tide water rivers, and succeed in almost any kind of soil. They thrive best when planted in an open place. I would therefore recommend, that they should be fixed at about ten feet apart, round the fields, by which means they would be no incumbrance, but contribute to the support of the fences, as they would serve for live posts. The leaves soon rot, and become good manure, insomuch that it is remarkable that grass grows better under these trees, than any other.

Every farmer who has fifty acres of land, might plant three hundred trees round his fields; which being disposed as before directed, would be a great addition to the beauty of his farm.

Let us suppose that each fullgrown tree will produce two bushels of fruit upon an average (some I have seen bear thrice that quantity.) From a farm then of fifty acres, six hundred bushels of fruit might be gathered; and as, from the foregoing experi-

ment, a bushel is found to yield a gallon of wholesome and very agreeable spirit, every farmer having that number of trees, might make six hundred gallons of liquor, as good as rum.

The expenses, attending the process, we will suppose to amount to one half of the value of the liquor when distilled, which, admitting it to be worth but two shillings per gallon, will leave a profit of thirty pounds per annum; a sum equal to the interest of a farm, that would cost five hundred pounds.

Were we to extend this calculation to what every fifty acres of cultivated land in this province only, would produce, we should find that we might soon become independent of the West Indies, for the expensive article of rum, and thereby yearly save many thousand pounds to this colony.

A valuable gum exudes from this tree; for the collecting of which, the society established in London for promoting arts and manufactures, offered a premium of twenty pounds sterling for the greatest quantity, not less than fifty pounds weight, that should be collected from the persimmon tree, in any of the British colonies in America, and imported from thence into the port of London, between the first of April, 1762, and the first of April, 1763. And for the next greatest quantity, not less than twenty-five pounds weight, a premium of ten pounds sterling.

I have also been informed, that an excellent beer is made of persimmons, in some of the southern provinces.

Hence it will appear, that the cultivation of the persimmon tree is an object worthy the attention of our farmers, as it promises great profit to themselves, and a still greater advantage to the community in general.

Philadelphia, 1771.

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Observations on the raising and dressing of hemp; communicated to the American philosophical society, by Edward Antil, esq.

HEMP is one of the most profitable productions the earth furnishes in northern climates; as it employs a great number of poor people in a very advantageous manner, if its manufacture be carried on properly: it may also furnish a ready remittance to Great Britain, and become a reciprocal advantage to both; and therefore it becomes worthy of the serious attention of the different legislatures of the northern colonies, of every trading man, and of every man, who truly loves his country.

But as the people of America do not appear, from their present management, to be acquainted with the best and most profitable method of cultivating and managing this valuable plant, I beg leave to inform them of some things that may be of advantage to them.

Whoever would raise hemp properly, and to advantage, should set aside two pieces of ground, of such dimensions each, as he shall be able to cultivate every year, and sow the one whilst he is manuring and preparing the other, for the succeeding year's crop; the higher and drier the ground, the better, provided it be well dunged, and made strong and mellow; the ground should not be too sloping, lest the good soil be washed away with hard rains; if it droops toward the south, so that it may have the full influence of the sun, it will be an advantage; low, rich, warm, dry grounds will also produce good hemp; but wet land, though never so rich, will by no means do. The ground being prepared and made very mellow, I now come to that part which must be particularly and exactly attended to,

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since the success of the crop greatly depends upon it. Some time in May, the ground being moist, and in a vegetating state, but by no means wet, it must be well ploughed, the furrows close and even—the soil lying light and mellow—it must be sowed very even with two bushels of seed upon one acre; a man with an iron-tooth-harrow follows the sower, and harrows in the seed, with two horses without any balks; for the less the ground be trampled, the better; if harrowing one way be not sufficient to cover the seed though it would be best if that could be done, it must be cross harrowed. The ground being moist, as I said before, but by no means wet, so as to clod, which would ruin the crop, the seed will all start and come up together, which is a sure sign of a good crop, and nothing after that, but too much wet, will hurt it; for hemp thus come up, bids defiance to weeds and grass of every kind; its growth is so quick, and it so effectually shades the ground, that nothing below can rise or show its head, and it so preserves all the moisture below, that the hotter and drier the weather, the faster it grows. Whereas, if the seed be sown when the ground is dry, the seed that lies deepest, where the moisture is, will come up first, and these will shade and starve those that come after, by which means the first comers will be too large, and the last will be much too small, so that the crop will be greatly damaged every way—so much depends upon this one circumstance, of sowing the seed when the ground is moist and fit to receive it. The crop, thus rightly managed, will stand as thick as very good wheat, and be from four to six feet high, according to the strength of the ground; and the stems will not be thicker than a good wheat straw; by this means, the hemp will be the finer, it will yield the greater quantity,

and it may be plucked from the ground like flax, which will be a very great saving: but if it be sowed thin, that is, one bushel to an acre, which is the common practice, it grows large, the hemp is harsh and coarse, and then it must be cut with hooks, which occasions great waste, for four or five inches just above ground is left, by way of stubble, which contains the best and heaviest part of the hemp.

When the hemp has got its growth, and is fit to be plucked, which you will know by the under leaves of the carle, or the hemp, turning yellow, and falling off, the sooner it is pulled, the better; it must then be bound up with straw bands, in single band sheaves, rather small than large, and each sheaf must be bound in two places; and the sooner it is carried to the water to rot, the better: water-rotted hemp, if it be rightly managed, is every way better than that which is rotted on the ground: there is less waste in it, when it comes to be dressed; it looks brighter and fairer to the eye; it is esteemed to be stronger and more durable; and always fetches a better price; besides it is much sooner done, and is rotted more even and alike, and with greater certainty and exactness: many people in America are acquainted with the method of rotting hemp in water; but, as many more are not yet acquainted with it, I shall, for their information, set down the method of doing it. Hemp may be rotted in stagnated or standing water, such as ponds, pools, or broad deep ditches, and in such water it is generally four or five days and nights a rotting, and sometimes longer, according to the heat or coolness of the weather; it may also be rotted in running water, as in a brook or river; and in such water, three or four days and nights are sufficient, according to the weather; to know whether the hemp be rotted

enough in either case, take a middling handful, out of the middle row, and try with both your hands to snap it asunder; if it breaks easy it is rotten enough; but if it yet appears pretty strong, it is not, and must lie longer, till it breaks with ease; and then it must be taken out, and dried as soon as possible; in handling the sheaves, take hold of the bands, and set them up an end against a fence, if one be near; or lay them down upon the grass, for the water to drain off, and then unbind them carefully, open and spread them to dry thoroughly; then bind them up again, and house them in a dry tight place: the reason of handling the hemp in this careful manner, is, that when it is well rotted, whilst it is wet, the lint comes off with the least touch; therefore, if it be handled roughly, or if, while it is wet, it be thrown into a cart and carried to a distance to be unbound and dried, it would be greatly hurt, and the owner would receive great damage by it; but when it is dry, it is handled with safety.

If the hemp be rotted in a brook or running water, the sheaves must be laid across the stream, for if they be laid down lengthways with the stream, the current of the water will wash away the lint, and ruin the hemp: it must be laid down, heads and points, two, four, or six thick, according to the depth of the water, and the quantity of hemp; if the bottom of the river be sand, gravel, or mud, three good strong stakes must be driven down at each end, above and below, and three long strong poles must be laid on the hemp, and fastened well to the stakes, in such manner as to force down the hemp under water, where it remains till it be rotted enough: though, if a muddy stream could be avoided, it would be best, because it is apt to foul and stain the hemp. If the

bottom of the stream be rocky or stony, so that stakes cannot be drove down to secure the hemp under water, and from floating away, then a rough wall must be made at the lower end of the hemp, and along the side, to keep it in, and strong poles or rails must be laid upon the top of the hemp, and pretty heavy stones upon them, so as to sink the hemp under water, where it must lie till it be rotted enough.

What hemp is intended for seed, should be sowed on a piece of ground by itself, which must be made very rich and strong; it must be sowed in ridges, six feet wide, and the seed must be of the largest and best sort, and sown very thin, at the rate of a peck upon an acre, or rather six quarts: for the thinner it is sown, the more it branches, and the more seed it bears; it should be sown some time the middle of April, and then the seed will not be ripe, till some time after the other hemp is done with. If you have no convenient place to sow your seed hemp by itself, then sow a border of six feet wide along the north and west sides of your hemp field; the reason of sowing your seed hemp in such narrow ridges or borders, is, that, when the carle, or he hemp, is ripe, and has shed its farina on the fumble, or female hemp, by which the seed is impregnated, and the leaves of the carle hemp fall off, and the stem grows yellow, you may easily step in along the sides, and pull up the carle hemp, without hurting the female, which now begins to branch out, and looks of a deep green colour and very flourishing: and when the seeds begin to ripen, which is known by their falling out of their sockets, you may, all along both sides, bend down the plants, and shake out the seed upon a cloth laid on the ground, for as they ripen, they scatter, upon being shaken by a hard wind, or

otherwise; then it must be watched, and the fowls and yellow birds kept from it, for they are immoderately fond of the seed; as the first ripe seeds are the fullest and best, they are worthy of some pains to save them; and the best way to do that, is, to bend down the plants all along, on each side of the border or ridge, as is said above, and shake them over a cloth spread on the ground to receive the seed; if one side of the plant be rooted out of the ground by forcing it down to shake out the seed, there will be no damage, for the seed that remains, will ripen notwithstanding; and the plant must thus be shaken every two or three days, till all the seed be ripe and thus saved; and this is much better than pulling up the plants by the roots, and shaking them on a barn floor, and then setting them up against a fence or the side of a barn, for the seed to ripen, and shaking them morning and evening on the barn floor; for by this method, which is the common practice, one third of the seed, at least, never comes to maturity.

It is well known to every farmer, that in the three bread colonies at least, the spring and summer seasons are of late years become very dry, so that a crop of flax is become very precarious, scarcely one year in seven producing a good one: this is a constant complaint in the mouth of every husbandman: now hemp does not require half the rain that flax does; this is a circumstance that is well worth the notice and attention of every farmer; and therefore by his raising hemp in the manner before directed, and by preparing it in the best manner, for spinning and weaving into good cloth, he can with greater certainty supply all the necessary uses of his family; and by selling the overplus, he can purchase such things as his wife and

daughters may think convenient, on extraordinary occasions. This, however, need not hinder them from raising some flax every year. But I think it is more for his interest to fix his chief dependence upon his crop of hemp, as that is more sure, and every way more profitable, the general run of seasons considered. And let him not be disgusted and think that I am about to persuade him, his wife, and daughters, to wear oz-nabrigs, for I can assure him, that I have seen dowlas made of hemp, worth five and six shillings the yard, which no farmer need be ashamed to wear. It,

I shall now endeavour to instruct the honest husbandman in a few easy rules for preparing his hemp, which he has raised and managed in the manner before directed.

Know, then, that the best preparation of hemp, for the manufacturing of cloth, is to render it as soft and as fine as possible, without lessening its strength, and the easiest and cheapest way of doing that, is certainly the best. This is to be found out by a variety of trials and experiments: but till a better way be discovered, which I hope will not be long first, and with which I should be greatly pleased—take the following method, which is the best I have yet been able to discover.

If you have a large wide kettle, that will take in your hemp at full length, it will be the better; but if your kettle be small, then you must double your hemp, but without twisting, only the small ends of every hand must be twisted a little, to keep them whole and from tangling; then first of all lay some smooth sticks down in the bottom of the kettle, so as to lie across one another, three or four layers, according to the bigness and deepness of your kettle; this is to keep the hemp from touching the liquor, then pour

some lye of middling strength, half as strong as what you make soap of, gently into the kettle, so much as not to rise up to the top of the sticks, they being kept down to the bottom; then lay in the hemp, each layer crossing the other, so that the steam may rise up through the whole body of the hemp; which done, cover your kettle as close as you can, and hang it over a very gentle fire, and keep it simmering or stewing, but not boiling, so as to raise a good steam for six or eight hours; then take it off, and let it stand covered, till it be cool enough to handle; then take out the hemp, and wring it very carefully as dry as you well can, and hang it up out of the way of the wind, either in your garret or in your barn, shutting the doors, and there let it remain, turning it now and then till it be perfectly dry; then pack it up in some close dry place, till you want to use it; but you will do well to visit it now and then, lest any part of it might be damp and rot. You must know, that wind and air weaken and rot hemp, flax, and thread, very much. Then at your leisure, twist up some of the hands, as many as you intend for present use, as hard as you can, and with a smart, round, smooth hand-beetle, on a smooth stone, beat and pound each hand by itself, all over very well, turning it round from side to side, till every part be very well bruised; you then untwist it, and hatchel it, first through a coarse, and then through a fine hatchel: and remember, that hatcheling must be performed in the same manner, as a man would comb a fine head of hair, he begins at the ends below, and as those untangle, he rises higher, till at last he reaches up to the crown of the head. The first tow makes good ropes for the use of the plantation: the second tow will make ve-

ry good oznabrigs, or coarse sheeting; and the hemp itself will make excellent linen. The same method of steaming softens flax very much.

Philadelphia, 1771.



Description of the grotto at Savatara.—

In a letter from the rev. Peter Mil-ter, of Ephrata, to William Barton, esq.

AS the course of my letter now tends this way, I must remind you, if ever you should publish a natural history of Pennsylvania, not to consign to oblivion that very curious petrifying cavern, of which, lest you should not have seen it already, I shall give some description.

It is situate on the east side of Swatara, close to the river. Its entrance is very spacious, and there is somewhat of a descent towards the other extremity; insomuch that I suppose the surface of the river is rather higher than the bottom of the cave. The upper part is like an arched roof, of solid lime-stone rock, perhaps twenty feet thick. On entering, are found many apartments, some of them very high, like the choir of a church. There is, as it were, a continual rain within the cave, for the water drops incessantly from the roof upon the floor; by which, and the water petrifying as it falls, pillars are gradually formed to support the roof. I saw this cave about thirty years ago, and observed about ten such pillars, each six inches in diameter and six feet high; all so ranged, that the place inclosed by them resembled a sanctuary in a Roman church: and I can assure you, that no royal throne ever exhibited more grandeur, than the delightful prospect of this *lufus naturæ*. Satisfied with the view of this, we discovered the resemblances of several monuments, incorporated into the

walls, as if the bodies of departed heroes were there deposited. Our guide then conducted us to a place, where, he said, hung the bell: this is a piece of stone issuing out of the roof, which, when struck, sounds like a bell.

Some of the stalactites are of a colour like sugar-candy, and others resemble loaf-sugar; but it is a pity that their beauty is now almost destroyed by the country people. The water, as it falls, runs down the declivity; and it is both wholesome and pleasant to drink, when it has discharged its petrifying matter. It is remarkable that we found several holes at the bottom of the cave, going down perpendicularly, perhaps into the abyss, which renders it dangerous to be without a light. At the end of the cave, there is a pretty run, which takes its course through part of it, and then loses itself among the rocks; here is also its exit, by an aperture which is very narrow. Through this the vapours continually pass outwards, with a strong current of air; and, at night, these vapours ascending, resemble a great furnace. Part of these vapours and fogs appear, on ascending, to be condensed at the head of this great alembic, and the more volatile parts to be carried off, through the aperture communicating with the exterior air before mentioned, by the force of the air in its passage.

I beg pardon for having troubled you with such a long detail. It appears strange to me that none of our philosophers have hitherto published a true account of this remarkable grotto.



On contentment.

MR. EDITOR,

IF all the philosophers in the world, and all the moral writers from

Socrates to Knox—if all were to assemble together in one place, and fix upon one certain rule of happiness, I do firmly believe, contentment would be their choice. And yet contentment is not easily acquired; so far from it, that most men shun it as their greatest enemy. Fate, as it is called, is very little to blame; for when a man has, to all appearance, as much wealth as he can need, an agreeable family, respectable connexions, good trade, &c. yet he is not happy; and perhaps no men so much complain of their circumstances as those very men whose circumstances are, in all human apprehension, the very best.

Tom Murmur began with three hundred a year; he was advised to go to the country, take a farm (to which employment he had been in part bred) marry a farmer's daughter with a little money, a great deal of love, and a good constitution, and be very happy. Tom did so, and his farm succeeded: his barns were filled with plenty; there were cows and calves, and swine and pigs, and hens, ducks, geese, and turkies, about the farm; and a chopping boy, at the year's end, became heir apparent to the animal and vegetable productions of this farm. But all would not do—A fat citizen, who in forty years time had amassed half a plum, retired from business, and took a house near Tom's farm. Tom and he became acquainted. Tom found that Mr. Traffic had not a single idea in his head, and that, with all his wealth, he was a mighty shallow fellow, one of those, whom, as Falstaff says, you may carve out of a turnip. Tom considered, that if this blockhead, who knew scarcely his mother tongue, could, in forty years, amass half a plum, he himself, with his education, could in twenty years easily acquire the fourth part of a plum, and then it would be

time enough to think of burying ones self in the country.

Full of this idea, Tom one night went to bed, and had such pleasing dreams of wealth, that he determined to quit his present situation, sell his farm, and carry his money to the city, the only place where money creates money. To sell his farm was easy; but to sell it to advantage was impossible; for Tom, in the honesty of his heart, told every body that he must sell it! Having, however, achieved this feat, he set out for the city, wife, child, and all, and got into trade. The first year his profits were considerable, but he could save nothing; he was as far from the plum as ever; if he gained a hundred pounds this year, more than the last, he had just as many more occasions for it as he had the last year, for his family was upon the increase—Yet Tom had no right to complain. He succeeded in business far beyond what he had a right to expect—Yet he was not satisfied—No sooner had he fifty or a hundred pounds ready for the bank, than some urgency of business demanded it; although he made ten, fifteen, and twenty per cent. in trade, yet he would have been far more happy to have money in the bank, and receive only three, four, or five, per cent.—For thinks he, “while I am thus spending every penny upon trade, what becomes of the £.25,000 which I was to retire with? At this rate I shall never be able to retire at all. I am now a slave to a counter, the slave of every proud madam, mistress, or sir, that chooses to come to my shop.”

Trade, however, still flourished with him. He was pronounced by all his neighbours to be a very lucky man, who, in so few years, had raised his capital from hundreds to thousands; and he found it necessary to enlarge his shop, build a counting-

house, warehouses, &c. &c. and had the reputation, and that justly, of being a man in a very capital line of business. His probity was unquestionable.—His wife and family were amiable and beloved by every body. He saw company, and treated them with liberality; but with all this, while every body set down Tom as a very happy man, he was, in reality, the miserablest dog alive, and all owing to the resolution he had set out with, which was to gain 25,000*l.* in twenty years, and then retire from business—As for contentment, it had been so long a stranger to him, that it was not natural to suppose it would ever return.—Tom lived respected, and was rich, but missed his favourite object—he lived unhappy—and died with discontent. And when the cause of his unhappiness was known, some pitied, but the greater part laughed at him; one old gentleman only gave an advice on this occasion, with which I shall conclude this letter. “No man ought to take a hobby horse, who does not know how to ride.”

I am, sir,

Your's,

OBSERVATOR.



Instructions for fine ladies.

LET a young lady, who is looking for a husband, be very careful not to promise or deny any suitor—it is vastly delightful to keep a company of admirers, fawning, flattering, swearing, kneeling, and so forth—a blush is requisite now and then to prevent any false insinuations of those envious maidens who may call you a coquette; and dear sir may be said once or twice in the day, to remove the disgusting title of a prude.

See no one in the mornings—six hours after you rise are little enough

in all conscience to pay proper respect to the looking-glass. To adjust every little article of dress, to do—undo—and *re-do* this and that, requires time and attendance.

If ever you see a prettier and more fashionable cap upon a friend than your own, be remarkably officious, and abuse its maker, find a thousand faults with it, and beg of the young lady to *wear it no more, as it makes an absolute fright*—meaning of your own.

When invited to a card party you must declare yourself a very *bad player*; for which reason you may take *some liberties*—should they be very cross to you during the evening, affect a laugh now and then; and when you catch a *naughty word* forcing its way through your lips at the sight of a wrong card, you must swallow it in an instant with a *hem*.

If kind nature has bestowed its enchanting gift of a voice, and that you can sing *prettily*, you may assume some airs—let the company press till they are almost weary, and whenever it is affirmed by any person that you can sing, you may insist upon it that you *cannot*—this is a great proof of *good manners*.

If nature has denied you that harmonious gift, never give the company the trouble of asking *twice*.

Have you a sister? If she be younger than you, let her not *dare* to contradict or thwart your pleasure. Assume all the airs and consequence of one *who knows the world better*: let her not supplant you in your wishes: but enjoy all the rights of your birth.

Is she an elder sister? then you must put your charms in array: give sunshine to your eye, smiles to your face; and whenever you hear an ardent lover panting at your sister's feet, breathing his love, and calling her the *fairest*, be sure you give him

the lie *with your eyes*; and seize the earliest opportunity of *wishing him a better wife*.

Are your teeth white? shew them upon all and no occasions: laugh at every speech, whether a joke or not; and swear *pon honour, you can't help it*.

Are your teeth black? then never, never laugh. If some rude unexpected story should provoke you, screw up your mouth as much as possible; practice the *niminiprimini* of —, and apply to your handkerchief: if all should fail, it will appear *good breeding*.

Are you to see your lover? never take notice of him. Speak to every gentleman but him. Bring Pompey with you; be stroking the poor pretty thing. Should your swain advance, you may desire him not to *teize you*; for “*it is vastly cruel to give pain*.”

To go to church every Sunday, morning and evening, is very necessary: to old ladies and gentlemen it conveys good ideas; they will naturally suppose you are praying for your sins, and those of your neighbours, when at the same time you may cast a coaxing eye to the finest beau you can see; who, if he possesses any gallantry, will take the hint.

There are proper times to smile and sigh: when convinced that your lover is secure, the *smile of triumph* is seasonable; but if you are in danger of losing him, whether through his own caprice, or the superiority of a rival's charms, the *linguishing sigh* may bring him back again. Some are very prone to the smile of *envy*, or the *forced grin*, upon these occasions; but this I by no means approve of; it more disgusts the lover, and delights the rival. Certainly a coaxing eye, accompanied with a sigh of love and tenderness, will have greater influence:—if the in

constant's heart is not adamant, he will most assuredly be induced to return to his former passion; but if it still remains obdurate, then introduce the smiles of *indifference* and *contempt*, and say, "since he is false, I am much better without him."

Be sure to abuse the dress of every friend, by declaring such a one's cap to be a fright; such a one's gown ill made; such a one's handkerchief in a wrong place; you will appear to possess great *friendship*, though, perhaps, there is another cause for these sayings.

It is necessary that you get by heart a few lines of poetry, out of Pope or Dryden, to introduce upon any subject—no matter how foreign from the meaning—it will convince the company that you have read these fine bards.

As *patches* are the most becoming things in the world, you must study the places where they are likely to attract notice, some hours, at your toilet: if one side of your face should possess any natural beauty, more than the other, I would advise you to put a patch *extraordinary* upon that side, in order to shew two things at once: should any ill natured pimple appear, you must undoubtedly cover it, no matter where it is—that patch is *doubly* necessary, and *must* be there.



Instructions for fine gentlemen.

WHENEVER you go to the coffee-house, monopolize all the newspapers; and whatever paper is wanted most, be sure to keep that the longest.

Whenever you fail in conversation to amuse the company, begin to laugh most immoderately; thereby you will command the attention of all the spectators.

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If any gentleman tells a remarkably good story, never laugh, but immediately answer it with another, and then laugh as much as you please.

Wherever you go, be determined to find fault with every thing; thereby you prove yourself a man of consequence.

Let your speeches be always preceded by some *pretty* oaths. Similes are very requisite to heighten conversation; no matter how *unlike* the subject they may be: but should you be astray for one, to *enforce* your arguments, think of your *master*, and you can never want. Certainly the *black gentleman* is the most convenient; and as he is the *nearest* to our mouths—*logice*—he must be the nearest to our *themes*: no matter what, he resembles every thing. *She's handsome as the devil—ugly as the devil—hard as the devil—soft as the devil—hot as the devil—cold as the devil—devilish good-humoured—devilish cross.*

Do you wish to be in love? visit your mistress when you have drank freely of your bottle. *Spirits* give *spirits*; and a man can never talk of his *heart*, unless something *puts it into his head*: then practise a dying speech; thump your breast; flourish your handkerchief; and present a pistol. If she is not moved with this, I shall give you leave to shoot yourself.

Whenever you are in company with ladies, endeavour to shew your sense and learning. Select as many *hard words* as possible, and quote passages out of Horace and Homer. Praise the former as a fine Grecian, and the latter for excelling in Latin. If you meet with a lady who knows more than yourself, be always of *her opinion*, and exclaim, "Gad's curse, you have taken *them words out of my mouth.*"

To carry a snuff-box is highly ef-

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sential; but then you must learn to take a pinch *with an air*; at the same time, cock up the little finger, to shew you have a ring. When the conversation begins to be very warm, and the arguments very powerful, a pinch of snuff is an excellent excuse for *not speaking*; because, if they insist upon your reasons, you can very easily set up a mock sneeze; and by the time that is finished—"Damn it, you forgot what you were going to say."

It shews a great genius to tell a good lie, now and then, with a very serious face; which, if you please, you may confirm as truth, by *parading your honour*; for then, though ever so much doubted, it must be swallowed: indeed, it requires very great sagacity to *bounce*—and *greater*, to *bounce out*, and unsay what you have said, whenever a discovery is made: the best method of doing this, is, by prefacing the story with *they say*; for then, *they*, whoever they are, are the liars, and not you; but if it is a lie, which must be told upon very good authority, mention a gentleman's name who never was in being, and ask, if they know him? and, as they do not, declare he is a man of the strictest truth, the most unexceptionable character, and that it was *from him* you heard so and so; which, therefore you are convinced is truth: should, however, your story be contradicted, and absolutely declared to be false, then you may say, that *your friend, mr. ———*, (the name of the *non-existing gentleman*) had it from *mr. ———*, (a well known name) who, you are very sorry to find, is a damned liar.



Character of an old maid.

AN old maid is one of the most cranky, ill-natured, maggot-

ty, peevish, conceited, disagreeable, hypocritical, fretful, noisy, glib, canting, censorious, out-of-the-way, never-to-be-pleased—good-for-nothing creatures—God help her poor nieces!—Heaven deliver all the unhappy young ladies, who are under her care!—how lectured!—how tormented!—how watched!—As she never knew what is the happiness—the pleasure of matrimony—the endeavours to prevent such, as are willing to learn—she preaches against all men and things—she pretends to be very religious, and visits the churches, in order to mark what *signs*—what *tokens of love* may be going on. During the sermon, she assumes all the decorum of a prudent, attentive lady—but should there be *marriages* or *christenings* to follow, she trots away, unwilling to be witness of what she knows nothing about—she affects to be very charitable—but alas!—she has not time to hear the petitions of any poor unfortunate wretch, being always in a violent hurry to prepare dinner, for—her dogs and cats, monkeys and parrots. She never reads plays, magazines, or novels, except when she is alone—then she indulges herself with Congreve, Behn, or Centlivre; but if she hears an unexpected foot, she throws them aside, and seizes a bible, prayer-book, or whatever godly book she has at hand for the occasion. Indeed her library is very curious—she puts her sermons over her journals—her hymns over her songs: so that one would imagine it was the *whole duty of man* to cover *Emma, Cecilia*, and other pretty, die-away creatures. Of all things upon earth, she says, she hates a man, because every man hates her—she cannot abide the fashions, and is eternally abusing her niece's dress. In short, an old maid enters the world, to take up room, not to make room for others

—if she lives to that age, which renders her *unmarriageable*—her life is, in the opinion of all her *young* acquaintances—too long—being of a tough, inflexible nature, that nothing can break her heart: indeed, an old maid's heart is, of all hearts, the most detestable—it contains neither sympathy, feeling, or any one thing appertaining to the *tender passions*—it is so full of *self*, that it can make no room for another; an old maid, therefore, can bear no other company, except such as herself—or, now and then, an old bachelor—“for old bachelors,” cry the old maids, “can do no harm—they are inoffensive creatures, and know the world.” Then, in the name of God, let them go together.



Character of a pedantic school-master.

HE may be truly called an arbitrary monarch, for he has dominions, and numerous subjects, who tremble at his frowns.

The former consist of extensive tracts of land, encompassed by strong walls, and called, in his language, *school boundaries*.

His palace is a large hall, formed into a variety of divisions, and denominated the *school room*.

Here he keeps his court: the *ferula* is his staff of authority; the *rod*, the instrument of justice; and he is himself both judge and executioner.

Like other monarchs, he tyrannizes, and passes sentence at pleasure; his will is a law, and unmerited punishments are inflicted, because he will have it so.

He is never wrong in his opinion; and whatever he says, must pass for an infallibility, and bear an equal sway with *Aristotle's ipse dixit*.

He soars no higher than the *syn-*

tax, or a scrap of Latin, got by heart out of Ovid or Virgil; and in making long harangues in praise of those *hopeful youths* he perfected for the university, he always lugs them in, without regarding the application, that his pupils may marvel at his learning. He frequently mutters them in his sleep, and makes love to his chambermaid, according to the strict rules of Ovid.

He always presides over his subjects, in *propria persona*, and he observes rigour even at meal times; for he tires their patience with a long grace, till the dinner is cold; and chides them, while eating, for not talking Latin to each other.

He is as happy, at the thoughts of holidays and vacations, as the youngest child; because he then is at liberty to make love. He affects to gallant his mistress; but she is soon disgusted with his ridiculous pedantry; however, he is not easily answered; “for a repulse” he says, “only adds fuel to the flame, she has kindled in his breast;” therefore with redoubled ardour, he becomes an *arrant Don Quixote*, attacking her in all the extravagance of romance, till the poor lady, thinking his brain turned, repels with equal violence his approaches, telling him that he is fitter for *bedlam* than a *school room*.

If he has any of the *fair sex* under his tuition, they are sure to be his favourites, and the greatest proficients; his boys then become a parcel of blockheads, and he tells *pretty miss*, she has more sense than twenty of them. He introduces love into her *lessons*, and flourishes *amorous expressions* in her *copy book*; but advancing to further liberties, he is detected and punished by the father or brother, as ignominiously as any of his pupils ever felt *birch* from himself.

Like the *czar*, he is despised out

of his own dominions, and regarded as an *old map* of some *barren island*.



Confidence, in a man, proved to belong alone to a fool, and in a woman, to a fille de joie.

CONFIDENCE is the antipode to modesty.

In men, it is generally occasioned by a want of knowledge of the world.

In women, by flattery—their God adored.

Confidence is legible in the countenance. It stamps a supposed value upon the wearer, and gives lustre and dignity to the aspect.

It has its apparent advantages; but these ever prove inevitable ruin.

A man of confidence presses upon every appearance of advantage, and thinks nothing above his merit.

The greatness of the attempt—the rank of his rivals—or the frequency of miscarriage—will not discourage him.

He rallies on a defeat, and grows desperate by an absolute denial. When his force is weak, he prevails by impudence, and when strong, by plausibility; thus either storming or persuading his object out of both reason and inclination.

He is profuse in promises; but is never complimented on a performance; but these are times, when mortals are more thankful for the former, than really gratified by the latter.

Mankind are more smitten by appearances than realities.

A good house, handsome equipage, and fine clothes, like a common travelling name, prevent enquiries.

Impertinences are mistaken for wit; and impossibilities, from such heroes, appear credible.

But, courteous reader, let me not impress you with an idea, that such conduct is current coin; when the confident man happens to mingle with those of true sense, his insignificance falls upon himself, and the slightest rebuke overthrows his chimeras.

His face, long unaccustomed to blush, conveys the ghastly countenance of a bedlamite, and he descends into his real character—that of a “fool.”

Thus is a confident man proved the jest of wise men, and the idol of the ignorant.

Let us now pourtray a confident woman: for the vice is so entirely misplaced in the fair sex, that it admits of no argument.

Confidence is, in them, the mother of impudence.

These generating, impudence begets immodesty; and their offspring, I trust, is only to be found among that unfortunate class of the sex, ‘celeped’ “*filles de joie*.”



On the importance of a good character, considered only with respect to interest.

AS the minds of men are infinitely various, and as they are therefore influenced in the choice of a mode of conduct by different inducements, the moralist must omit no motive, however subordinate in its nature, while it appears likely to lead some among mankind to a laudable, or even a blameless behaviour. A regard to ease, to interest, and to success, in the pursuits of wealth and ambition, may induce many to pursue an honest and honourable conduct, who would not have been influenced by purer motives: but, after they have once perceived the intrinsic excellence and beauty of such a conduct,

they will probably persevere in it for its own sake, and upon higher considerations.

To those who are to make their own way either to wealth or honours, a good character is usually no less necessary than address and abilities. Though human nature is degenerate, and corrupts itself still more by its own inventions; yet it usually retains an esteem for excellence. But even if we are arrived at such an extreme degree of depravity as to have lost our native reverence for virtue; yet a regard to our own interest and safety, which we seldom lose, will lead us to apply, in all important transactions, to men whose integrity is unimpeachable. When we chuse an assistant, a partner, a servant, our first enquiry is concerning his character. When we have occasion for a counsellor or attorney, a physician or apothecary, whatever we may be ourselves, we always choose to trust our property and persons to men of character. When we fix on the tradesmen who are to supply us with necessaries, we are not determined by the sign of the lamb, or the wolf, or the fox; nor by a shop fitted up in the most elegant taste, but by the fairest reputation. Look into a newspaper, and you will see how important the characters of the employed appear to the employers, from the highest to the lowest rank. After the advertisement has enumerated the qualities required in the person wanted, there constantly follows, that none need apply who cannot bring an undeniable character. Offer yourself as a candidate for any office whatever, be promoted to honour and emolument, or in any respect attract the attention of mankind upon yourself, and if you are vulnerable in your character, you will be deeply wounded. This is a general testimony in

favour of honesty, which no writings and no practices can refute.

Young men, therefore, whose characters are yet unfixed, and who, consequently, may render them just such as they wish, ought to pay great attention to the first steps which they take on entrance into life. They are usually careless and inattentive to this object. They pursue their own plans with ardour, and neglect the opinions which others entertain of them. By some thoughtless action or expression, they suffer a mark to be impressed upon them, which scarcely any subsequent merit can entirely erase. Every man will find some persons, who, if they are not enemies, view him with an envious or a jealous eye; and who will gladly revive any tale to which truth has given the slightest foundation.

Indeed all men are so much inclined to flatter their own pride, by detracting from the reputation of others, that supposing we were able to maintain an immaculate conduct, it would still be difficult to preserve an immaculate character. But yet it is wisdom not to furnish this detracting spirit with real subjects for the exercise of its activity. While calumny is supported only by imagination, or by malice, we may sometimes remove, by contradicting it; but whenever folly or vice have supplied facts, we can seldom do more than aggravate the evil, by giving it an apparent attention. The malignity of some among the various dispositions of which mankind are composed, is often highly gratified at the view of injured sensibility.

In this turbulent and confused scene, where our words and actions are often misunderstood, and oftener misrepresented, it is indeed difficult even for innocence and integrity to avoid reproach, abuse, contempt and

hatred. These not only hurt our interest and impede our advancement in life, but sorely afflict the feelings of a tender and delicate mind. It is then the part of wisdom first to do every thing in our power to preserve an irreproachable character, and then to let our happiness depend chiefly on the approbation of our own consciences, and on the advancement of our interest in a world where liars shall not be believed, and where slanderers shall receive countenance from none but him who, in Greek, is called, by way of eminence, diabolus, or the calumniator.



On the folly of being anxiously curious to enquire what is said of us in our absence.

THE best dispositions have usually the most sensibility. They have also that delicate regard for their reputation which renders them sorely afflicted by the secret attacks of calumny and detraction. It is not an unreasonable and excessive self-love, but a regard to that, without which a feeling mind cannot be happy, which renders many of us attentive to every word, that is whispered of us in our absence.

From whatever motive it arises, an anxious curiosity to know the reports concerning ourselves, is an infallible cause of misery. No virtue, no prudence, no caution, no generosity, can preserve us from misrepresentation. Our conduct must be misunderstood by weak intellects, and by those who see only a part of it, and hastily form a judgment of the whole. Every man of eminence has those who hate, who envy, and affect to despise him. These will see his actions with a jaundiced eye, and will represent them to others in the colours in which themselves be-

hold them. Many, from carelessness, wantonness, or from a desire to entertain their company, are inclined to sport with respectable characters, and love to display their ingenuity by the invention of a scandalous tale. Nothing renders a man more agreeable in many companies than his possessing a fund of religious anecdotes.

It is certain, then, that from weakness, wantonness, or malevolence, a man, whose merit renders him a topic of conversation, will be misrepresented. He who solicitously enquires what is said of him, will certainly hear something which will render him uneasy. His uneasiness will be increased, when he finds the poisoned arrow is shot in the dark; so that no abilities can repel the blow, and no innocence shield from the assailant. Open attacks can be openly opposed; but the obscure insinuation proceeds without the possibility of resistance, like the worm, which penetrates the ship that has withstood the cannon. It is better, therefore, not to be too anxious to discover attacks, which, when, discovered, add to our torment, but cannot be successfully resisted.

Indeed, we are apt to feel upon these occasions more acutely than we ought. We are told by a menial servant, or any other of our spies, that a person, whom we esteemed our friend, has spoken slightly of us, made a joke upon us, or cast a severe reflexion. Immediately on hearing the information, our blood boils within us. The indignity, we imagine, calls for our warmest resentment. Our friend is discarded, or suspected, as a treacherous wretch, unworthy of our love and confidence. This hasty ebullition of resentment is, I am ready to allow, very natural, and so are many other disorders of the passions. But, if we were to study the case, and acquire

a right idea of the ways of men in society, we should find, that, in such instances, our resentments may not only be too violent, but causeless; for we should recollect that the human mind, without absolutely relinquishing its principles, is often inclined, from the incidental influence of temper, of levity, of frolic, of intemperance, of precipitation, to speak inconsistently with them, and in a manner which the general tenor of our conduct uniformly contradicts. We should also recollect, that, besides this temporary variableness of the mind, the tongue is unruly, and, when the spirits, or the passions are high, utters almost spontaneously what the mind, which ought to hold the bridle, would willingly keep in. If we reflect upon these things, and upon what has fallen under our experience, we may perhaps discover, that even real and worthy friends may speak unkindly of us, without any design to hurt us, or to violate the bonds of friendship. It is the infirmity of human nature which causes unintentional lapses in the duties of friendship, as well as in all other duties. By too eagerly listening to casual censure, whispered in a careless manner, we increase the evil, and cause a rupture where none was intended.

A man, who is constantly solicitous to hear the reports which are raised of him, of his family, and of his conduct, depends, in a great measure, for happiness, upon his servants; upon those, whose ideas are narrow, and whose hearts too often ungrateful; who overhear a part of a conversation, and supply the rest, when they repeat it, by invention; who love to entertain the visitors and acquaintance with the private affairs of the house in which they live, and who are apt to blacken the characters of their supporters and protectors, in revenge for a reprimand, or from the natural malignity of a bad heart.

The tongue, said Juvenal, is the worst part of a bad servant. But the master of a family, who is always endeavouring to collect what is uttered by his humble friends, as servants have been called, will find himself subject to perpetual mortification. And it is a circumstance which renders his solicitude peculiarly unwise, that after all the idle stories which their garrulity or resentment may lead them to propagate, they may be as good servants as any others he might engage in their room, or as human nature, in its uncultivated state, is found in general to afford. When their foolish words are uttered, they vanish into air; and the servants return to their duties, and probably will serve their masters as usefully and as faithfully, as if nothing had been said in their angry or unthinking moments:—so little meaning and weight is there in the words of the weak and the passionate, and so inconsistent is it with wisdom to listen to that tale, which, while it sinks into the mind of him who hears that he is the subject of it, passes over the minds of others, as the shadow over the earth; or, supposing it to be noticed, remembered, and even capable of doing him an injury, he can only make it more mischievous by paying attention to it, and by giving it an importance not its own.

It will conduce, in a peculiar manner, to the peace of all persons who superintend large families, or large numbers of assistants, or of subordinate classes—such as the governors of schools and colleges, the generals of armies, the employers of manufacturers, and many others in situations somewhat similar—if they can habituate themselves to disregard those calumnies, which will certainly be poured upon them, though they should not merit ill treatment.

Their hearts will indeed often be wrung with grief, if they are sensible of every ill-natured whisper which makes its way, like the worm in the earth, and may at last corrode the worthiest bosom, if the breast-plate of reason be not previously applied. Whoever has many individuals under his direction, is exposed to the malice of them all; and, as dispositions and tempers are often diametrically opposite, he can scarcely fail to offend as many as he can please: for the very conduct which pleases one set, will give offence to the other. Friends, as well as enemies, are liable to ill-humour and caprice; and every malignant remark is as naturally levelled at the superintendent as the musquet at the target. A man, who has many persons under him, must not only not go in search of the darts which are thrown at him, but, even when he cannot avoid seeing them, must let them waste their force unregarded. If he does not adopt this conduct, his life will be a perpetual torment, and may possibly terminate in that which is frequently the death of good men, a broken heart.

Perhaps we might be less inclined to enquire what is said of us in our absence, and less affected with it when discovered, if we considered how freely we ourselves are apt to speak even of those we love. We censure and we ridicule others, in the gaiety and thoughtlessness of conversation: and what we have said, makes so little impression upon ourselves, that we forget it; and, in the next hour, probably speak with honour of the same persons, and then, and on all occasions, would be ready to serve them. Beware of the man, says Horace, who defends not his absent friend, when he is blamed by others, and who blames him himself. But such is our nature, that, in a fit of levity, a man will speak

of another, and hear him spoken of, in such terms, as, in his serious moments, he would resent. Let any man ask himself, whether he has not often said such things of others, without meaning to injure them, or ever thinking seriously of what he was saying, as, if he were to hear that they were said of himself, in any manner whatever, he would warmly retaliate? Let him then endeavour to see things in the same light, when he finds he has been carelessly censured, in which he saw them when he carelessly censured others. Indeed, it must be allowed, that a man of sensibility and honour cannot take too much pains to vindicate his character from any open and direct calumny; but the same spirit, which leads him to that manly conduct, will induce him to leave the dirty dealers in scandal to themselves, and to their mean occupations.

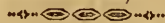
Though a delicate regard for character is virtuous and rational, yet it is really true, that we all estimate our own value among others much higher than it is estimated by them. What is said of us seldom sinks so deeply in their minds, as, from a vain idea of our own importance, we are apt to imagine. We are occasionally talked of, it may be, in the course of common conversation, and serve for topics, together with the weather, the wind, and the news; but he who thinks that he is the constant object of his neighbours' accurate and close inspection, is ignorant of human nature. Man's chief object of attention is himself; and though, to fill an idle hour, he may talk of others, it is carelessly and indifferently; and, whether he speaks in praise or dispraise, he often means neither to serve nor injure. From supposing ourselves of more consequence with others than we are, we suspect, that they are conversing about us, when

they really think not of us: and, when they are known by us to have spoken unkindly or contemptuously, we immediately consider them as declared enemies. Our suspicions are awakened when led to entertain bad opinions of mankind, and our good-humour is soured for ever. "But good-humour," says an elegant writer, "is a salt which gives a seasoning to the feast of life; and which, if it be wanting, renders the feast incomplete. Many causes contribute to impair this amiable quality; but nothing, perhaps, more than bad opinions of mankind." To avoid bad opinions of mankind, much of their ill deeds, and ill sayings, must be attributed to thoughtlessness, and not to malignity only; we must not always be on the watch to hear what is said against us in an unguarded hour; we must be humble, and consider, whether we do not treat others just as we complain of being treated by them; and, while we complain of mankind, whether ourselves, and the dispositions which we entertain, do not furnish some of the most just causes of the complaint. Upon the whole, let it be our first object to do our duty, and not to be very anxious about any censure, but that of conscience.

Let the weak and the ill-natured enjoy the poor pleasure of whispering calumny and detraction: and let the man of sense and spirit display the wisdom and dignity of disregarding them. The dog bays the moon, but the moon still shines on in all its beautiful serenity and lustre, and moves in its orbit with undisturbed regularity.

The scriptures, among all their other recommendations, abound with passages which finely pourtray the human heart. I will cite one passage, which is very apposite to the subject of this paper: "Take no

"heed to all words that are spoken,
"lest thou hear thy servant curse
"thee. For oftentimes, also, thine
"own heart knoweth, that thou
"thyself likewise hast cursed o-
"thers."



On the pleasures of reflexion.

THAT the enjoyments of the understanding exceed the pleasures of sense, is a truth, confessed by all who are capable of exerting the faculties of thinking in their full vigour. But by these pleasures are generally understood sublime contemplations on subjects of science and abstruse disquisition—contemplations which can only be the result of uncommon powers, and extraordinary efforts.

But there are intellectual pleasures of another kind; to the enjoyment of which neither great abilities nor learning are required. These are no other than the pleasures of reflexion, which are open to the illiterate mechanic, as well as the sage philosopher, and constitute some of the sweetest satisfactions of human life.

There are few who have not felt pleasing sensations arising from a retrospective view of the first period of their lives. To recollect the puerile amusements, the petty anxieties, and the eager pursuits of childhood, is a task in which all delight. It is common to observe, that on no subject do men dwell with such pleasure, as on the boyish tricks and wanton pranks which they practised at school. The hoary head looks back with a smile of complacency, mixed with regret, on the season when health glowed on the cheek—when lively spirits warmed the heart—and when toil strung the nerves with vigour.

Cicero has remarked, that events

the most disagreeable, during their immediate influence, give an exquisite satisfaction when their consequences have ceased: and Æneas solaces his companions, under the hardships they endured, with the consideration that the remembrance of their sufferings would, one day, give them satisfaction. That these sentiments are just, is well known to those who have enjoyed the conversation of the soldier. Battles, skirmishes, and sieges, at which perhaps he trembled during the action, furnish him with topics of conversation, and sources of pleasure, for the remainder of his life.

Reflexion is the properest employment, and the sweetest satisfaction, in a rational old age. Destitute of the strength and vigour necessary for bodily exertions, and furnished with observations by experience, the old man finds his greatest pleasure to consist in wandering in imagination over past scenes of delight—in recounting the adventures of his youth, the vicissitudes of human life, and the public events to which he is proud of having been an eyewitness. Of so exalted a nature are these enjoyments that the theologists have not hesitated to assert, that to recollect a well-spent life, is to anticipate the bliss of a future existence.

The professors of philosophy, who will be acknowledged to have understood the nature of true and substantial pleasure better than the busy, the gay, and the dissipated, have ever shewn a predilection for privacy and solitude. No other cause have they assigned for their conduct in forsaking society, than that the noise and hurry of the world are incompatible with the exertion of calm reason, and dispassionate reflexion. The apophthegm of that ancient who said, “he was never less alone, than when by himself,” is not to be

considered merely as an epigrammatic turn. In vain was it to pursue philosophy in the Suburra: she was only to be courted, with success, in the sequestered shade of rural retirement.

Were the powers of reflexion cultivated by habit, mankind would at all times be able to derive a pleasure from their own breasts, as rational as it is exalted. To the attainment of this happiness, a strict adherence to the rules of virtue is necessary: for let it be remembered, that none can feel the pleasures of reflexion, who do not enjoy the peace of innocence.



Ethelgar, a Saxon poem

By the ill-fated Chatterton.

TIS not for thee O man! to murmur at the will of the Almighty. When the thunders roar, the lightnings shine on the rising waves, and the black clouds sit on the brow of the lofty hill—who then protects the flying deer, swift as the fable cloud, tost by the whistling winds, leaping over the rolling floods, to gain the hoary wood: whilst the lightnings shine on his chest, and the wind rides over his horns? When the wolf roars—terrible as the voice of the Severn—moving majestic as the nodding forests on the brow of Michel-stow—who then commands the sheep to follow the swain, as the beams of light attend upon the morning?—Know, O man! that God suffers not the least member of his work to perish, without answering the purpose of it's creation. The evils of life, with some, are blessings: and the plant of death healeth the wound of the sword. Doth the sea of trouble and affliction overwhelm thy soul? look unto the Lord; thou shalt stand firm in the days of temptation, as

the lofty hill of Kinwulf: in vain
shall the waves beat against thee:
thy rock shall stand.

Comely as the white rocks—
bright as the star of the evening—
tall as the oak upon the brow of the
mountain—soft as the showers of
dew, that fall upon the flowers of
the field, Ethelgar arose, the glory
of *Exanceastre; noble were his an-
cestors, as the palace of the great
Kenric. His soul with the lark,
every morning ascended the skies
and sported in the clouds. When,
stealing down the steep mountain
wrapt in a shower of spangling
dew, evening came creeping to the
plain, closing the flowers of the day,
shaking her pearly showers upon the
rustling trees—then was his voice
heard in the grove as the voice of
the nightingale upon the hawthorn
spray. He sang the works of
the Lord; the hollow rocks joined
in his devotions: the stars danced
to his song; and the rolling
years, in various mantles drest, con-
fessed him man. He saw Egwina
of the vale. His soul was asto-
nished, as the Britons who fled be-
fore the sword of Kenric. She was
tall as the towering elm—stately
as a black cloud bursting into thun-
der—fair as the wrought bowels of
the earth—gentle and sweet as the
morning breeze—beauteous as the
sun—blushing like the vines of the
west—her soul as fair as the azure
curtain of heaven. She saw Ethel-
gar: her soft soul melted as the fly-
ing snow before the sun. The
shrine of St. Cuthbert united them.
The minutes fled on the golden
wings of bliss. Nine horned moons
had decked the sky, when Ælgar saw
the light. He was like a young plant
upon the mountain's side, or the sun
hidden in a cloud. He felt the strength

of his sire; and swift as the light-
nings of heaven, pursued the wild
boar of the wood. The morn
awoke the sun; who, stepping from
the mountain's brow, shook his rud-
dy locks upon the shining dew:
Ælgar arose from sleep: he seized
his sword and spear, and issued to
the chace. As waters swiftly falling
down a craggy rock, so raged
young Ælgar through the wood;
the wild boar bit his spear, and the
fox died at his feet. From the
thicket a wolf arose, his eyes flam-
ing like two stars. He roared like
the voice of the tempest: hunger
made him furious: and he flew like a
falling meteor to the war. Like a
thunderbolt tearing the black rock,
Ælgar darted his spear through his
heart. The wolf raged like the
voice of many waters, and seizing
Ælgar by the throat, he sought the
regions of the blessed. The wolf
died upon his body. Ethelgar and
Egwina wept. They wept like the
rains of the spring. Sorrow sat upon
them as the black clouds upon the
mountains of death: but the power
of God settled their hearts.

The golden sun arose to the high-
est of his power; the apple perfum-
ed the gale; and the juicy grape de-
lighted the eye. Ethelgar and Eg-
wina bent their way to the moun-
tain's side, like two stars that move
through the sky. The flowers grew
beneath their feet; the trees spread
out their leaves; the sun played up-
on the rolling brook; the winds
gently passed along; dark, pitchy
clouds veiled the face of the sun: the
wind roared like the noise of a battle;
the swift hail descended to the
ground; the lightnings broke from
the sable clouds, and gilded the
dark-brown corners of the sky; the
thunder shook the lofty mountains;
the tall towers nodded to their foun-
dations; the bending oaks divided
the whistling wind; the broken

NOTE.

* Exeter.

flowers fled in confusion round the mountain's side. Ethelgar and Egwina fought the sacred shade: the bleak winds roared over their heads, and the waters ran over their feet. Swift from the dark cloud the lightning came; the skies blushed at the sight. Egwina stood on the brow of the lofty hill, like an oak in the spring; the lightnings danced about her garments, and the blasting flame blackened her face: the shades of death swam before her eyes: and she fell breathless down the black steep rock: the sea received her body; and she rolled down with the roaring water.

Ethelgar stood terrible as the mountain of Meindip: the waves of despair harrowed up his soul, as the roaring Severn ploughs the fable sand. Wild as the evening wolf, his eyes shone like the red vapours in the valley of the dead. Horror sat upon his brow; like a bright star shooting through the sky, he plunged from the lofty brow of the hill, like a tall oak breaking from the roaring wind. Saint Cuthbert appeared in the air; the black clouds fled from the sky; the sun gilded the spangling meadows: the lofty pine stood still; the violets of the vale gently moved to the soft voice of the wind; the sun shone on the bubbling brook. The saint, arrayed in glory, caught the falling mortal; as the soft dew of the morning hangs upon the lofty elm, he bore him to the sandy beach, whilst the sea roared beneath his feet. Ethelgar opened his eyes, like the grey orbs of the morning, folding up the black mantles of the night—"Know, O man!" said the member of the blessed, "to submit to the will of God; he is terrible as the face of the earth, when the waters sunk to their habitations; gentle as the sacred covering of the oak; secret as the bottom of the great deep; just as the rays of

the morning. Learn that thou art a man, nor repine at the stroke of the Almighty, for God is as just as he is great." The holy vision disappeared as the atoms fly before the sun. Ethelgar arose, and bent his way to the college of Kenewalcin; there he flourishes as a hoary oak in the wood of Arden.



Letter from the hon. Robert Yates and the hon. John Lansing, esquires, to his excellency George Clinton, esq. governor of the state of New York, containing their reasons for not subscribing to the federal constitution.

SIR,

WE do ourselves the honour to advise your excellency, that in pursuance of concurrent resolutions of the honourable senate and assembly, we have, together with Mr. Hamilton, attended the convention, appointed for revising the articles of confederation, and reporting amendments to the same.

It is with the sincerest concern we observe, that, in the prosecution of the important objects of our mission, we have been reduced to the disagreeable alternative, of either exceeding the powers delegated to us, and giving our assent to measures which we conceive destructive to the political happiness of the citizens of the united states—or opposing our opinion to that body of respectable men, to whom those citizens had given the most unequivocal proofs of confidence. Thus circumstanced, under these impressions, to have hesitated, would have been to be culpable: we, therefore, gave the principles of the constitution, which has received the sanction of a majority of the convention, our decided and unreserved dissent: but we must candidly confess, that we should have

been equally opposed to any system, however modified, which had in object the consolidation of the united states into one government.

We beg leave, briefly, to state some cogent reasons, which, among others, influenced us to decide against a consolidation of the states. These are reducible to two heads.

1st. The limited and well-defined powers under which we acted, and which could not, on any possible construction, embrace an idea of such magnitude, as to assent to a general constitution, in subversion of that of the state.

2d. A conviction of the impracticability of establishing a general government, pervading every part of the united states and extending essential benefits to all.

Our powers were explicit, and confined to the sole and express purpose of revising the articles of confederation, and reporting such alterations and provisions therein, as should render the federal constitution adequate to the exigencies of government, and the preservation of the union.

From these expressions, we were led to believe, that a system of consolidated government could not, in the remotest degree, have been in contemplation of the legislature of this state: for so important a trust, as the adopting measures which tended to deprive the state government of its most essential rights of sovereignty, and to place it in a dependent situation, could not have been confided by implication: and the circumstance, that the acts of the convention were to receive a state approbation, in the last resort, forcibly corroborated the opinion, that our powers could not involve the subversion of a constitution, which, being immediately derived from the people, could only be abolished by their express consent,

and not by a legislature, possessing authority vested in them for its preservation. Nor could we suppose, that, if it had been the intention of the legislature, to abrogate the existing confederation, they would, in such pointed terms, have directed the attention of their delegates to the revision and amendment of it, in total exclusion of every other idea.

Reasoning in this manner, we were of opinion, that the leading feature of every amendment, ought to be the preservation of the individual states, in their uncontrolled constitutional rights; and that in reserving these, a mode might have been devised, of granting to the confederacy, the monies arising from a general system of revenue—the power of regulating commerce, and enforcing the observance of foreign treaties, and other necessary matters of less moment.

Exclusive of our objections, originating from the want of power, we entertained an opinion, that a general government, however guarded by declarations of rights or cautionary provisions, must unavoidably, in a short time, be productive of the destruction of the civil liberty of such citizens as could be effectually coerced by it: by reason of the extensive territory of the united states, the dispersed situation of their inhabitants, and the insuperable difficulty of controuling or counteracting the views of a set of men (however unconstitutional and oppressive their acts might be) possessed of all the powers of government: and who, from their remoteness from their constituents, and necessary permanency of office, could not be supposed to be uniformly actuated by an attention to their welfare and happiness; that however wise and energetic the principles of the general government might be, the extremities of the united states could not be kept in due submission

and obedience to its laws, at the distance of many hundred miles from the seat of government; that if the general legislature were composed of so numerous a body of men, as to represent the interests of all the inhabitants of the united states, in the usual and true ideas of representation, the expense of supporting it would become intolerably burdensome; and that, if a few only were vested with a power of legislation, the interests of a great majority of the inhabitants of the united states must necessarily be unknown; or, if known, even in the first stages of the operations of the new government, unattended to.

These reasons were, in our opinion, conclusive against any system of consolidated government: to that recommended by the convention, we suppose most of them very forcibly apply.

It is not our intention to pursue this subject farther, than merely to explain our conduct in the discharge of the trust which the honourable the legislature reposed in us. Interested, however, as we are, in common with our fellow citizens, in the result, we cannot forbear to declare, that we have the strongest apprehensions, that a government so organized, as that recommended by the convention, cannot afford the security to equal and permanent liberty, which we wished to make an invariable object of our pursuit.

We were not present at the completion of the new constitution: but before we left the convention, its principles were so well established, as to convince us, that no alteration was to be expected, to conform it to our ideas of expediency and safety. A persuasion, that our further attendance would be fruitless and unavailing, rendered us less solicitous to return.

We have thus explained our mo-

tives for opposing the adoption of the national constitution, which we conceived it our duty to communicate to your excellency, to be submitted to the consideration of the honourable legislature.

We have the honour to be,
with the greatest respect,
your excellency's
most obedient, and
very humble servants,
ROBERT YATES,
JOHN LANSING, jun.

His excellency governor Clinton.



Address to the minority of the convention of Pennsylvania.

NUMBER I

Gentlemen,

THE great question, which at this time engages the attention of the united states, calls for the fairest and most dispassionate discussion. Mistakes, in taking up the subject, must lead to erroneous conclusions: and men of pure intentions, both among yourselves, and the people at large, should misconceptions have arisen, may continue averse to the system, after it has received the fiat of all the conventions. Well-intended attempts to throw light upon the interesting subject, cannot, therefore, be displeasing to you.—Without further introduction, then, I will proceed to a point of considerable importance, in itself and in its consequences, on which I conceive your opinions have been erroneously formed, and on which I earnestly hope we shall finally concur.

The consolidation of the united states into one government, by the operation of the proposed constitution, (in contradistinction from a confederacy) appears to you to be the consequence of the system, and the intention of its framers: this is the point of difference which I mean to treat of: and for the present I shall

confine my observations to it alone.

Were the parts of the federal government which you have particularized, as much of the nature of consolidation as you seem to suppose, that would certainly be its real nature and design, and the state sovereignties would indeed be finally annihilated. The appearances, which have misled you, I shall remark on in the course of these papers: and I shall endeavour to exhibit clear and permanent marks and lines of separate sovereignty, which must ever distinguish and circumscribe each of the several states, and prevent their annihilation by the federal government, or any of its operations.

When the people of America dissolved their connexion with the crown of Britain, they found themselves separated from all the world, but a few powerless colonies, the principal of which they expected to induce into their measures. The crown having been merely a centre of union, the act of independence dissolved the political ties which had formerly existed among the states: and it was attended with no absolute confederacy. But many circumstances conspired to render some new form of connexion desirable and necessary. We wished not to continue distinct bodies of people, but to form a respectable nation. The remains of our ancient governments kept us in the form of thirteen political bodies: and, from a variety of just and prudent considerations, we determined to enter into an indissoluble and perpetual union. Though a confederation of sovereign states was the mode of connexion which was wisely devised, and actually adopted, yet in that feeble and inadequate bond of union, to which we assented, articles, longly partaking of the nature of consolidation, are observable. We see, for example, that the free inhabitants of each state were rendered, to all in-

tents and purposes, free citizens of all the rest. Persons fleeing from justice in one state, were to be delivered up by any other, in which they might take refuge, (contrary to the laws prevailing among distinct sovereignties,) whereby the jurisdiction of one state prevailed the territories of all the rest, to the effectual length of trial, condemnation, and punishment. The right, to judge of the sums to be expended for the use of the nation, lies, even under the old confederation, solely with congress: and, after the demand, is fixed by them, and formally made, the states are bound, as far as they can be bound by any compact, to pay their respective quotas into the federal treasury, by which the power of the purse is given to them: nor can the states constitutionally refuse to comply. It is very certain, that there is not, in the present federal government, vigour enough to carry this actually-delegated power into execution: yet, if congress had possessed energy sufficient to have done it, there is no doubt but they would have been justifiable in the measure. The season of invasion, however, would have been very unfavourable for internal contests.

We shall find, that the right, to raise armies and build navies, is also vested in congress by the present confederation: and they are to be the sole judges of the occasion, and of the force required. The state, therefore, that refuses to fulfil the requisitions of congress on either of these articles, acts unconstitutionally. It appears, then, that it was thought necessary at the time of forming the old federal constitution, that congress should have what are termed "the powers of the purse and the sword." That constitution contained a delegation of them, because the framers of it saw that those powers were necessary to the perpetuity and efficiency of the union,

to obtain the desirable ends of it. It is certainly very true, that the means provided to enable congress to apply those powers, which the constitution vested in them, were so liable to opposition, interruption, and delay, that the clauses containing them became a mere dead letter. This, however, was not expected or desired by any of the states at the time: and their subsequent defaults are infringements of the letter and spirit of the confederation. On these circumstances I intreat your most dispassionate and candid consideration. I beg leave to remark, however, that as in the present constitution they are only appearances of consolidation, done away by other facts and circumstances; so also are the facts and observations in your address merely appearances of a consolidation, which I hope to demonstrate does not exist. The matter will be better understood by proceeding to those points which shew, that, as under the old, so under the new federal constitution, the thirteen united states were not intended to be, and really are not, consolidated in such manner as to absorb or destroy the sovereignties of the several states. In order to a perfect understanding of each other, it may be proper to observe here, that by your term consolidation, I understand you mean the final annihilation of separate state government or sovereignty, by the nature and operations of the proposed constitution.

Among the proofs you adduce of such consolidation being the intention of the late convention, is the expression, "We the people." Though this is a mere form of words, it will be well to see what expressions are to be found in the constitution in opposition to this, and indicative of the intentions of the convention, before we consider those things, which, as I conceive, secure the states from a possibility of losing their respective sovereignties.

First, then, tho' the convention propose that it should be the act of the people, yet it is to be done in their capacities as citizens of the several members of our confederacy—who are declared to be the people of "the united states"—to which idea the expression is strictly confined, and the general term of America, which is constantly used in speaking of us as a nation, is carefully omitted. A pointed view was evidently had to our existing union. But we must see at once, that the great reason of "the people" being mentioned, was, that alterations of several constitutions were to be effected, which the convention well knew could be done by no authority but that of "the people," either determining themselves in their several states, or delegating adequate powers to their state conventions. Had the federal convention meant to exclude the idea of "union," that is, of several and separate sovereignties joining in a confederacy, they would have said, we the people of America: for union necessarily involves the idea of competent states, which complete consolidation excludes. But the severalty of the states is frequently recognized in the most distinct manner, in the course of the constitution. The representatives are to be inhabitants of the state they represent: each state is to have a representative: the militia officers are to be appointed by the several states: and many other instances will be found in reading the constitution. These, however, are all mere expressions: and I should not have introduced them, but to overbalance the words you have mentioned by a superior weight of the same kind. Let us, then, proceed to evidences against consolidation, of more force than the mere form of words.

It will be found on a careful examination, that many things, which are indispensibly necessary to the ex-

istence and good order of society, cannot be performed by the federal government, but will require the agency and powers of the state legislatures or sovereignties, with their various appurtenances and appendages.

1st. Congress, under all the powers of the proposed constitution, can neither train the militia, nor appoint the officers thereof.

2dly. They cannot fix the qualifications of electors of representatives, or of the electors of the president of the president or vice-president.

3dly. In case of vacancy in the senate, or the house of representatives, they cannot issue a writ for a new election, nor take any of the measures necessary to obtain one.

4thly. They cannot appoint a judge, constitute a court, or in any other way interfere in determining offences against the criminal law of the states; nor can they, in any way, interfere in the determinations of civil causes between citizens of the same state, which will be innumerable and highly important.

5thly. They cannot elect a president, vice-president, a senator, or a federal representative, without all of which their own government must remain suspended, and universal anarchy must ensue.

6thly. They cannot determine the place of choosing senators, because that would be derogatory to the sovereignty of the state legislatures, who are to elect them.

7thly. They cannot enact laws for the inspection of the produce of the country, a matter of the utmost importance to the commerce of the several states, and the honour of the whole.

8thly. They cannot appoint or commission any state officer, legislative, executive, or judicial.

9thly. They cannot interfere with the opening of rivers and canals; the making or regulation of roads, ex-

cept post roads; building bridges; erecting ferries; the establishment of state seminaries of learning; libraries; literary, religious, trading, or manufacturing societies; erecting or regulating the police of cities, towns or boroughs; creating new state offices; building light houses, public wharves, county jails, markets, or other public buildings; making sale of state lands, and other state property; receiving or appropriating the incomes of state buildings and property; executing the state laws; altering the criminal law; nor can they do any other matter or thing appertaining to the internal affairs of any state, whether legislative, executive, or judicial, civil or ecclesiastical.

10thly. They cannot interfere with, alter, or amend the constitution of any state, which, it is admitted, now is, and, from time to time, will be more or less necessary in most of them.

The proper investigation of this subject will require more of your time than I can take the liberty of engaging at present. I shall therefore leave what I have now written to your honest and cool reflexion.

A FREEMAN.

(*Number II. in our next.*)



Form of the ratification of the federal constitution by the state of Massachusetts.

Commonwealth of Massachusetts.

In convention of the delegates of the people of the commonwealth of Massachusetts, February 6, 1788.

THE convention having impartially discussed, and fully considered, the constitution of the united states of America, reported to congress by the convention of delegates from the united states of America, and submitted to us, by a reso-

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lution of the general court of the said commonwealth, passed the 25th day of October last past—and acknowledging with grateful hearts the goodness of the supreme Ruler of the universe, in affording the people of the united states, in the course of his providence, an opportunity, deliberately and peaceably, without fraud or surprise, of entering into an explicit and solemn compact with each other, by assenting to and ratifying a new constitution, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defence, promote the general welfare, and secure the blessings of liberty to themselves and their posterity—do, in the name and in behalf of the people of the commonwealth of Massachusetts, assent to and ratify the said constitution of the united states of America.

And as it is the opinion of this convention, that certain amendments and alterations in the said constitution, would remove the fears, and quiet the apprehensions of many of the good people of this commonwealth, and more effectually guard against an undue administration of the federal government, the convention do therefore recommend, that the following alterations and provisions be introduced into the said constitution :

1st. That it be explicitly declared, that all powers, not expressly delegated by the aforesaid constitution, are reserved to the several states, to be by them exercised.

2d. That there shall be one representative to every thirty thousand persons, according to the census mentioned in the constitution, until the whole number of the representatives amount to 200.

3d. That congress do not exercise the powers vested in them by the 4th sect. of 1st art. but in cases, when a

state neglects or refuses to make the regulations therein mentioned, or shall make regulations subversive of the rights of the people, to a free and equal representation in congress, agreeably to the constitution.

4th. That congress do not lay direct taxes, but when the monies arising from the impost and excise are insufficient for the public exigencies ; nor then, until congress shall have first made a requisition upon the states, to assess, levy, and pay their respective proportions of such requisition, agreeably to the census fixed in the said constitution, in such manner as the legislatures of the states shall think best—and in such case, if any state shall neglect or refuse to pay its proportion, pursuant to such requisition, then congress may assess and levy such state's proportion, together with interest thereon, at the rate of six per cent. per annum, from the time of payment, prescribed in such requisition.

5th. That congress erect no company of merchants, with exclusive advantages of commerce.

6th. That no person shall be tried for any crime, by which he may incur an infamous punishment, or loss of life, until he be first indicted by a grand jury, except in such cases as may arise in the government and regulation of the land and naval forces.

7th. The supreme judicial federal court shall have no jurisdiction of causes, between citizens of different states, unless the matter in dispute, whether it concerns the reality or personality, be of the value of three thousand dollars, at the least ; nor shall the federal judicial powers extend to any actions between citizens of different states, where the matter in dispute, whether it concerns, the reality or personality, is not of the value of fifteen hundred dollars, at the least.

8th. In civil actions between citizens of different states, every issue of fact, arising in actions at common law, shall be tried by a jury, of the parties, or either of them, request it.

9th. Congress shall, at no time, consent, that any person, holding an office of trust or profit, under the united states, shall accept of a title of nobility, or any other title or office, from any king, prince, or foreign state.

And the convention do, in the name and in behalf of the people of this commonwealth, enjoin it upon their representatives in congress, at all times, until the alterations and provisions fore said, have been considered, agreeably to the fifth article of the said constitution, to exert all their influence, and use all reasonable and legal methods, to obtain a ratification of the said alterations and provisions in such manner as is provided in the said article.

And that the united states in congress assembled may have due notice of the assent and ratification of the said constitution by this convention - It is

Resolved, That the assent and ratification aforesaid, be engrossed on parchment, together with the recommendation and injunction aforesaid, and with this resolution; and that his excellency John Hancock, esq. president, and the hon. William Cushing, esq. vice-president of this convention, transmit the same, countersigned by the secretary of the convention, under their hands and seals, to the united states in congress assembled.

JOHN HANCOCK, *president.*

WM. CUSHING, *V. P.*

(*Countersigned*)

George Richards Minot, *secretary.*

Account of the procession in Boston, in solemnization of the ratification of federal constitution.

Boston, February 9, 1788.

THE committee of tradesmen met on Thursday; and, by public advertisements, requested the attendance of the mechanics and artizans of every description in town, at Faneuil-hall at nine o'clock, yesterday, in order to form, and proceed in grand procession therefrom, to testify their approbation of the ratification of the federal constitution, by the convention of this commonwealth, the 6th inst. and deputed their chairman to request their brethren, the husbandmen of the adjacent towns, to join them; who, though the notice was very short, accordingly appeared in town at 9 o'clock, when the several trades being met, at 11 o'clock, the whole, in grand procession, moved from the hall, and the following was the order of the procession.

Sixteen foresters, with axes, and brush scythes.

Music.

A PLOUGH,

drawn by two horses, and two yokes of oxen, with a person holding it; and others clearing away the obstructions.

(*The sons of freedom venerate the plough.*)

Three sowers, with baskets, strewing grain, and smoking their pipes.

A brush-harrow, drawn by a horse.

A large roller, drawn by a horse and pair of oxen.

Four reapers, with sickles, &c.

Four mowers, with scythes, followed by 18 haymakers, with rakes, &c.

Eight husbandmen, with hoes, spades, and other farming utensils.

A cart, drawn by a yoke of oxen,
with flax-dressers at work, and
in their working dresses.

A yoke of fat cattle, with killers,
properly equipped.

A cart loaded with beef, followed
by eight master butchers, in
clean frocks.

[The above were from Roxbury.]

BLACKSMITHS,

preceded by mr. Baker,
to the number of 73, carrying
implements of their craft—de-
corated with ribands, &c.

SHIPWRIGHTS,

preceded by deacon Sharp,
to the number of 43, with tools de-
corated, &c.

ROPE-MAKERS,

preceded by mr. William M^c Neill,
to the number of 75—their waists
encircled with hemp—with a cable
sled, drawn by workmen, decora-
ted with colours, and attended with
Martial Music.

MAST-MAKERS,

preceded by mr. S. Harris,
to the number of 59, with tools
decorated, &c.

SAIL-MAKERS,

preceded by deacon Barrett,
to the number of 30, with their
tools.

SHIP-JOINERS,

preceded by mr. T. Uran,
to the number of 34, with their
tools decorated.

BLOCK-MAKERS,

preceded by mr. J. Balsh,
to the number of 30, with tools, &c.

MATHEMATICAL INSTRUMENT-MAKERS,

to the number of 6, with instru-
ments, &c.

COOPERS,

preceded by mr. Avers,
to the number of 23, with tools
decorated, &c.

BOAT-BUILDERS,

preceded by mr. T. Hitchborn,
to the number of 20, with tools, &c.

PAINTERS,

to the number of 20, with pallets,
&c. decorated.

CARVERS,

preceded by mr. Skillings,
with tools, &c. decorated, to the
number of 12.

RIGGERS,

to the number of 18, with tools, &c.
GLAZIERS & PLUMBERS,
preceded by capt. Norton Brailsford
to the number of 16, with dia-
monds, &c.

BAKERS,

headed by mr. J. White,
to the number of 40, with their
tools &c.

TANNERS & CURRIERS,

preceded by mr. S. Bais,
to the number of 28, with tools, &c.
SHOEMAKERS

preceded by mr. S. Bangs,
to the number of 50, with lasts, &c.
decorated.

TAYLORS,

to the number of 56, with their
tools, measures, &c.

HATTERS,

preceded by major Seward,
to the number of 26, with their
bows, furs, &c.

TALLOW-CHANDLERS,

to the number of 8, with a minia-
ture press, moulds, &c.

Mr. Vose, on horseback.

The ship

FEDERAL CONSTITUTION,

on runners, drawn by 13 horses.
John Foster Williams, esquire, com-
mander;

Lients.
Weeks &
Adams
Mr. La
Noine, mas.



Mr. E. Si-
gourney,
purser;
manned by
13 seamen,

With full colours flying—followed
by captains of vessels, 85 seamen,
dressed in ribands, and about
150 of the principal
merchants in town.

SHIP-BUILDERS.

to the number of 20, with a work-yard, drawn by 13 horses, in which were 7 or 8 vessels, on the stocks, with men at work.

CARPENTERS,

preceded by mr. Crafts, to the number of 136, with tools of every sort, decorated.

MASONS,

preceded by major Bell, to the number of 70, with trowels, &c. as at work.

CABINET & COACH-MAKERS,

WHEEL WRIGHTS, &c.

to the number of 30, with the insignia of their crafts.

PRINTERS,

preceded by mr. B. Edes, to the number of 15, with a frame, &c. drawn on a sled, and compositors at work.

SADDLERS,

to the number of 12, with tools decorated, &c.

GOLDSMITHS,

to the number of 14, with hammers, &c.

LEATHER-DRESSERS,

preceded by major W. Dawes, on horseback, (dressed in skins) to the number of 20, with skins, and working tools.

CARD-MAKERS,

to the number of 12, with wire, &c.

The

COMMITTEE of TRADESMEN, in a sleigh, drawn by four horses.

The

REPUBLICAN VOLUNTEERS, commanded by captain Gray, closed the procession.

In this order, the whole proceeded by the houses of the several gentlemen who represented this town in convention, and testified their approbation of their conduct by three huzzas from the whole line, and salutes from the ship, and the volunteer company. About four o'clock, the procession arrived at the hall, where re-

freshment was liberally provided, of which, as many as could find admittance, partook; but though the hall will hold fifteen hundred men, not above one-third of the procession could get in; however, we were happy that our country friends were accommodated to their wishes.

At two o'clock, when the procession passed by the state-house, captain Johnson's company of artillery honoured them with a salute of thirteen guns.

•••••

An act of assembly having passed in April, 1782, directing all the trees in the streets of Philadelphia, to be cut down and removed, gave occasion to the following publication.—

The law was never executed, and soon afterwards repealed.

Speech of a standing member. By the hon. Francis Hopkinson, esq.

To the Printers of the Pennsylvania Gazette.

Gentlemen,

LOOKING over a file of papers, which lay on my table, I found a very extraordinary speech delivered by a very extraordinary personage in the house of Assembly in April last—which I had taken down in short-hand—but not from the mouth of the speaker. I much wonder that this oration, with the surprising circumstances that attended it, hath not been noticed in any of the public prints. I hope you will think the following account of that transaction, not unworthy a place in your paper.

On the 12th of April last, the house took into consideration, and was debating by paragraphs, a bill entitled, “an act for regulating party walls and partition fences in the city of Philadelphia”—when, to the amazement of all present, the business was interrupted by a voice perfectly articulate, proceeding from the capital of one of the columns which support the ceiling of the room. This

voice claimed a right to be heard on the subject of the bill then before the house. After the first surprise, at such an unusual prodigy, had a little subsided, the right of a column to interfere in the business of the house, was considered and objected to; and it was urged, that no instance had ever occurred, where a *wooden* member—a *block-head*—had presumed to speak in that assembly; that this column could by no construction of law, be admitted as the representative of any part or district of Pennsylvania; having never been balloted for, elected, or returned by any officer of government, as a member of assembly; that the house, when fully met, necessarily consisted of a certain number of members, *and no more*; and that this number is full and complete by the returns from the several counties, as appears by the records of the house. Therefore, if this column should be allowed a voice, there must be a supernumerary member somewhere—which would be an absolute violation of the constitution; and lastly, that it was contrary to the order of nature, that an *inanimate log* should presume to interfere in the affairs of *rational* beings; providence having been pleased to distinguish so obviously between *men* and *things*.

To all this the column *firmly* replied, that he was properly speaking, a *standing* member of that house; having been duly fixed in his station by those who had the power and right to place him there: that he was the true representative of a numerous race, descended in a direct line from the *aborigines* of this country—those venerable ancestors, who gave the name of *Penn's-sylvania* to this state, and whose posterity now inhabit every county in it: that he was not only a member of the house, but one of its principal *supporters*—inasmuch, they could never *make a house* without him: that he had faithfully attended

the public business; having never been fined as an absentee; and that those very members, who now opposed him, had confided in his wisdom and integrity, by constantly appealing to him in every contest, about the rules and internal economy of the house*; and lastly, that as the bill under consideration, so nearly concerned his fellow-creatures, and as he found himself miraculously endowed with speech, for the occasion, he was determined to make use of his present power, in behalf of those who could not speak for themselves.

After much debate, it was resolved that the house would hear what this importunate post had to say, respecting the bill before them; but peremptorily refused to allow him a vote on this or any other business in that assembly.

The columnar orator, having obtained leave, addressed the house in the following words:

“I am happy, O fellow-citizens! that speech hath been given me on this important occasion—and that I have your permission to exercise a power, thus miraculously obtained, in the cause of truth and justice.

“I *stand* here, this day, an *upright* advocate for injured innocence—what fury—what madness—oh, deluded senators! hath induced you to propose the extirpation of those to whom you are indebted, for so many of the elegancies, comforts, and blessings of life? If the voice of justice is not to be regarded within these walls, let at least your own interests influence your conduct on this occasion; for I hope to shew that your safety and happiness are much more deeply concerned in the business you are upon, than you are at present aware of.

NOTE.

* *The rules of the house are framed and hung up against one of the columns.*

“ By the 12th section of the bill now before you, it is proposed to cut down and remove all the trees standing in any of the streets, lanes, or alleys of this city. What ! do we then hold our lives on such uncertain tenure ? shall the respectable and inoffensive inhabitants of this city, stand or fall, according to the caprice of a few ignorant petitioners ? and will this house, without remorse—without even the form of trial—give its sanction to an edict, which hath not had a parallel, since the sanguinary days of Herod of Jewry ? I hope to convince this honourable house, that trees, as well as men, are capable of enjoying the rights of citizenship, and therefore ought to be protected in those rights ; that having committed no offence, this arbitrary edict cannot constitutionally pass against them ; and that your own welfare and that of your constituents, is warmly concerned in their preservation and culture.

“ The superiority, which man hath assumed, over what he calls the irrational and inanimate parts of the creation, is a superiority only founded in his own pride and ignorance of our nature and faculties. The same divine hand that formed you, formed us also. The same elements that nourish you, nourish us. Like you, we are composed of bones, blood-vessels, fibres—and, for aught you know, muscles and nerves ; witness the whole class of sensitive plants ; wherein voluntary motion is made sensible, even to your gross vision. Like you we die and return to the earth from which we sprang ; and then the wisest amongst you, cannot distinguish between the dust of an elm and that of an emperor. But I go much farther, and assert, from your own authorities, that we sleep, and wake—that we are male and female—that we are married and given in marriage, and that we propagate our spe-

cies to fuller effect, and in a manner somewhat similar to what you do yourselves. In support of these assertions, I could cite many respectable authorities from the ancients,—and, amongst the moderns, *Grew*, *Millington*, *Ray*, *Camerarius*, *Morland*, *Geoffroy*, *Vaillant*, and, above all, your favourite *Linnaeus*.

“ Wherein, then, doth the vast difference between *man* and the vegetable kingdom consist ? Oh ! cries yonder *loquacious* lord of the creation, we can *converse*—we can *reason* ; oh ! cries yonder *reflectless* and *filgetty* member, we can move from place to place at pleasure. To the latter I answer, so can an *ass*, an *owl*, an *eel*, and to much better advantage than he can, with all his *locomotive* faculties.—The former requires a more serious reply :

“ We can *converse*—we can *reason*.” Be it so. Man, arbitrary man, hath affixed certain ideas to certain sounds : if these noises or sounds are adapted to his miserable apprehension, they are called, *language*, *reason*, *music*, and what not. But if the man should not be wise enough to understand the meaning of the noise he hears, he hesitates not to pronounce it, *jargon*, *nonsense*, *unintelligible stuff*. Thus, for instance, a *man* stands up and makes a long noise, which is called, *philosophy*, *divinity*, *law*, &c. ; an *ass* lifts up his head, and makes a much greater noise ; and it is called *braying*. Yet to his own species, the *ass* is an intelligent creature, and his language is well understood by them. If, then, man can thus mistake the matter with respect to brutes, although he sees that nature hath given them the organs of speech, and daily hears them exercise those organs for the purposes intended, may he not also be mistaken with respect to the language of plants—a language too refined to make any impression upon his gross and callous senses ? That

such a language doth actually exist, might be sufficiently proved from the authority of holy writ : wherein we are repeatedly told, that the vallies rejoice and sing, and the cedars of Lebanon praise the Lord. But I shall content myself with reading to your honours, a passage to this purpose, from that ingenious author, *Cyrano de Bergerac—voyage to the moon*, p. 91.

—“ This fancy of eating by himself made me curious to know the reason of it. I was answered, that he chose not to taste either the odor of meats or herbs, unless they had died spontaneously : because he imagined them beings capable of grief.” “ I am not much surpris’d,” replied I, “ that some orders of people here abstain from flesh and things that have sensitive life : yet it seems to me ridiculous to fear hurting a cabbage in the cutting.” “ For my part,” replied the demon, “ I must own there appears to me good reasons for such an opinion ; for is not a cabbage a being existing in nature, as you are ? have you not both her equally for your mother ? and she is more immediately so to the vegetal than the rational production. The generation of the latter she hath left to the whim of a parent ; a rigour she doth not extend to the former ; inasmuch, as she *obliges* one to produce another. And whilst one man is scarcely able to get more than a score of his species at best, a head of cabbage shall produce four or five hundred of its own sort. Should we say, that nature hath a greater esteem for a man than she has for a cabbage, it would be only with a view to make us laugh : for nature is incapable of passion, and can never love nor hate. If she was susceptible of love, she certainly would have a greater tenderness for the insensible cabbage, than for the unre-

“ lenting man who destroys it.”— And again, page 95—“ Who has given us the knowledge of certain beings superior to us, to whom we are neither related nor proportioned ; and whose existence we find it as difficult to conceive, as the manner in which a cabbage can address itself to its own species. To understand which communication, our senses are too weak. Remember, if you can, amongst all the species of animals, one more proud than the cabbage—who, while you destroy him, is above complaining—yet, though he dares to murmur, he thinks, nevertheless, the more. If he wants such organs as you are master of, formed for wailings and tears, yet he has others wherewith to implore heaven to revenge the injury done him, and expects it will not be withheld. It is not unlikely but you may ask, how I know the cabbage has these fine thoughts ? but, inform me first, can you prove it has not ? or that, at the close of the night, the Russia cabbage does not say to the savoy—good savoy, your most humble servant.”—

But still, says man, we have rationality and risibility, to distinguish us from the rest of the creation : that is, when nature gave one man the power to reason, she gave another the power to laugh at him. For our parts, we are contented to be directed by the laws of nature—which fully enable us to answer the end of our creation. We pretend not to be wiser than the hand that made us, and therefore we are guilty of no follies or excesses. We employ none of our powers in devising means for the more speedy and effectual destruction of our species. We do all the good we can, and, when we can do no more, we retire from our present form of existence, to make room for our successors.

This rationality, on which you so much value yourselves, is, in my opinion, a striking mark of imbecility and disgrace—a punishment inflicted on your race, doubtless, for some heinous offence, heretofore committed. The intelligent beings of the spiritual world never reason; they see truth intuitively; they know the whole chain of causes and effects; they see that in a triangle, the greatest angle must be subtended by the longest side, without any reasoning upon the problem. And in terrestrial nature, there is no creature but man that is obliged to reason. They all perform their respective functions with precision and certainty, under the influence of a law that cannot err; whilst your reason is ever involving you in absurdities and difficulties; is ever deducing false conclusions from false premises, and the wiser you think yourselves, the more mischief you generally do. What is reason one day, is not reason another. About thirty years ago, you reasoned upon the disease called the small-pox, and thousands in every city and country, fell sacrifices to your rational system: but you have now discovered that your system is no longer rational, and have adopted a quite different mode of practice. Accident discovered your error, and fact and nature contradicted the learned reasonings of many a lengthy treatise on the subject; and this has been the case in every art and science: the solid reasonings and supposed discoveries of one age, have been deemed fallacious and despised by another.

Besides this, your reason teaches you, to square all nature by your ideas of truth, and you know not what truth is: for instance, you eat, and drink, and walk, and you say, I have life; but yonder willow can do none of these—therefore it is inanimate. Deluded man! can your weak intellects discover all the nice gradations

of life—from the stone to the moss that grows upon it—from the moss to the sensitive plant—from the sensitive plant to the polypus—from the polypus to the oyster—from the oyster to the ape—from the ape to the man—from the man to the angel!—from the angel to an infinite series of beings, whom you know nothing of? do you not see that all the exhibitions in nature, are so many different modifications and manifestations of one original essence or principle? is not the gravity which retains Jupiter in his orbit, the same gravity which operates on a grain in the scales of a Jew? The intelligent beings above you, amuse themselves with the ridiculous blunders your rationality is continually making. They despise the wretch who stretches every faculty of his mind, to amass a hoard of wealth, which he has not the spirit to enjoy, they pity the inevitable fate of the voluptuous, and the vain toils of ambition—but they laugh incessantly at the folly of him who ransacks the earth to gather sticks and stones, shells and bones, and after spending years in arranging them to his mind, makes a raree-show of his collection, and struts a philosopher, full of self-importance and vain conceit.

If follies, absurdities, and mistakes were the only effects of your reason, they might be patiently borne with; but when you exercise it to overreach, ruin and destroy each other—when you exert its powers to conceal or embarrass truth—to establish falsehood—to lead the blind out of his way, and the lame into a ditch—to render yourselves more ingeniously wicked, and more effectually mischievous—those divine intelligences look down with horror and disgust on you and your boasted reason—they turn aside from the hateful object, and view with pleasure, the stately oak and wide-spreading beach—

the water-loving willow, and the fruitful vine—even all the vegetable creation, which, from the pine that waves on the mountain's top, to the herb that drinks the dew of the valley, fill with exact propriety their respective stations; and are invariably governed by the laws of nature, which are the laws of truth and wisdom.

After all, your reason is but instinct broke loose—or rather, instinct is reason confined within proper limits, and directed to the proper objects. Do not, then, presume upon a faculty, which, on the whole, will be found to have been the curse of your species. To prove this you need only look into history, for the facts and characters of former times—or to look round you, for those of the present.

I might now, may it please your honours, point out many circumstances, wherein nature hath most evidently and advantageously distinguished the vegetal part of her works from man, by giving them a real and substantial superiority. But, lest I should wander too far in so large a field, and encroach on your patience, I shall confine myself to one instance only. When a man dies---when he can no longer perform the functions of life---his body in a few hours becomes a useless, loathsome mass of corruption, which his nearest friends hurry away, and put out of sight for ever. It is not so with us---witness my appearance here this day. It is now several years since an end was put to my vegetal life, by the fatal axe. My skin was stripped off, and my limbs lopped away; yet you see my body is still of use; I stand here, firm, sound, and hearty; and, barring an accident from all-consuming fire, I shall attend the future debates of this house, when all those, whom I have now the honour to address, shall be no more.

Having, I hope, fully convinced your honours, that trees as well as men are capable of citizenship, I shall now proceed to consider the crimes and offences with which the trees in this city have been charged, and which the 12th section of the bill before the house is intended to punish.

The preamble of this section sets forth, “whereas trees growing in the public streets, lanes and alleys of the said city of Philadelphia, do obstruct the prospect and passages thro’ the same, and also disturb and disorder the water courses and foot-ways, by the extending and increase of the roots thereof, and must tend to spread fires when any break out in the said city: be it therefore enacted, &c.”

Your honours have an old saying called a proverb, which naturally occurs on this occasion---“it is easy to find a stick to beat a dog”---that is, a man is never at a loss for a reason for punishing those who are in his power, and whom he wishes to oppress. But these trees, it seems, obstruct the view:--of what? of many wretched buildings, and some dirty alleys. For I deny that any one elegant street or building is more obstructed by trees than is necessary for the comfort of the inhabitants, and to give beauty to the prospect. Men of taste have always thought that a due mixture of trees and buildings---the beauties of art and nature united---elegant architecture discovered through luxuriant foliage, compose an exhibition truly delightful and sublime. But it seems your honours think otherwise: this clause, therefore, should run thus: “whereas a moderate proportion of trees is a great ornament to a city: and whereas we have no taste whatever for elegance and ornament: Be it therefore enacted,” &c.

As to those trees obstructing the passage, this I must absolutely deny.

They have modestly posted themselves as close to the gutters and water-courses as they can, leaving both foot-way and cart-way free and open. If, however, any straggler should be found so obstructing the passage, let him die the death—I have nothing to say in his behalf. But it is alledged, that they, the aforesaid trees, disturb and disorder the water-courses and foot-ways by the extension of their roots. If so, cut off the offending roots: but do not destroy the whole tree. When justice exceeds her limits, she forfeits her name. This evil is of modern discovery: and, if instances should be demanded to support the charge, they must be carefully looked for: I aver that the fact is not generally true. Lastly: trees communicate fire. Now, a tree hath no greater enemy in nature than fire—cut him into inch pieces—grind him into sawdust—he will still exist as wood, for many, many years. Fire, alone, can suddenly separate its component parts, and destroy its name. Whilst it hath life, it obstinately resists this all-consuming foe—no art can make a green tree burn—no, nor a green log—as many a cursing cook can tell.

Besides the charges laid in the bill, two others have been suggested against these poor trees, viz. that they obstruct the operation of the engines, in case of fire; and that they are not well affected to the present government, because they remained in the city, when the enemy took possession of it. As to the first, little need be said. When the case occurs, let the obstacle be removed: an axe is always to be had; and the operation may easily and speedily be performed. But to depopulate a whole city for the possible offence of a few individuals, is certainly neither law nor reason. As to the second, it will not, I apprehend, be

contended, at this day, that the leaving the city, or not, on the approach of the enemy, makes the true line of distinction between whig and tory. It must be confessed, that we remained when others fled.—We stood our ground, and we suffered in our country's cause. Turn, worthy senators, turn your eyes to yonder fields—look towards the banks of Schuylkill—where are now those verdant groves, that used to grace the prospect, and enrich the scene? Where are now those venerable oaks, that o'er the evening walk of sober citizen, of musing bard, of sportive youths, and amorous nymphs and swains, were wont to spread their all-refreshing shade? Alas! nought now remains, but lifeless stumps, that moulder in the summer's heat, and winter's frost—the habitations fit of poisonous fungi, toads, and ever-gnawing worms—*Hinc ille lachrymæ!* These are thy feats, O Howe!—Excuse, great sirs, this weakness of a poet—or rather, join your sympathising tears with mine. The loss is yours—a loss, the importance of which you have not, perhaps, duly considered, and which I shall now endeavour to present to your view.

Having endeavoured to shew the rank my fellow trees hold in the scale of beings, their capacities of pleasure and pain—having also obviated the charges brought against them—and touched upon their sufferings in the great political revolution of this country—I come now to the last argument I intended for their defence: I mean the great use and importance they are of to mankind: and here I shall be very concise, avoiding to mention those numerous circumstances, in which trees obviously contribute to the pleasure, convenience, and profit of men—confining myself only to one serious consideration; I mean, how far the

healths and lives of the citizens of Philadelphia are concerned in the business you have now in hand. A few hours will be sufficient to execute this fatal law : but it will take years to repair the damage, when you shall have discovered your error. Consider, therefore, O rash and capricious mortals ! what you are about to do, whilst consideration may be of any use. Caution is never too late : repentance may be. Know that those trees, whom you are about to extirpate, are your best—your safest physicians. The health of your citizens depends upon their growth : and you are now to decide not only upon the existence of a few trees, but on the lives of hundreds of your fellow creatures : I say, these trees are your best—your safest physicians. They have published no books : therefore they have no systems to support. Their practice is ever uniform, dictated by nature, and established by success : and therefore they make no whimsical experiments on their patients—experiments uncertain in every thing but misery and death : in a word, they have no occasion to kill one hundred, in order to learn how to cure one.

In the autumn, they modestly drop their foliage, to admit the comfortable rays of the sun to your dwellings—their leaves being then of no farther use to you. But no sooner does the spring advance, than they arm themselves in your defence ; they see the enemy approach—innumerable little deaths, in various subtle forms. These are, by the fermenting heats of summer, generated in every pool, gutter, and common sewer, and in all the murky filth of your city. No sooner have the poisonous atoms acquired sufficient malignity, but they leave their native cells, and float in air. One of these, inhaled, infects the blood—and soon a husband, son, or father falls. To

prevent this, the friendly tree spreads its broad and numerous foliage.—Every leaf is extended to intercept and absorb the floating mischief ; and thus receiving and digesting the noxious particles, they purify the ambient air. This important philosophy was first discovered by dr. Priestly, improved by Ingenhausen, and will be prosecuted by Fontana, to the great enlargement of useful knowledge. The enemy had studied Priestly, when they cut the trees from yonder plain—hoping thereby to leave the atmosphere poisoned for your destruction. Is it not obvious, that diseases most prevail when vegetation ceases ? About the middle of August, most leaves have acquired their utmost growth : they are saturated with noxious effluvia : they can no longer perform their friendly office : and therefore, from that time to the first frost of the season, which effectually concludes the generation of those pernicious airs, sickness and deaths are most frequent. This use of the vegetable tribe seems to be a modern discovery—unless we may suppose it to have been known to the Indians of America, because a leaf pasted on the breast, is, amongst them, the insignium of a physician.

And will you then, oh guardians of the people ! will you by a fatal decree, banish from amongst you, those salutary citizens, to whom you are so much indebted for the blessings of health, without which every other blessing loses its value ? And what advantage do you propose to yourselves by such a measure ? your streets and alleys, indeed, will not be obstructed by trees—but they may be obstructed by lengthened funerals and mournful processions. I shall not prolong the subject. If your honours will but balance the imaginary good with the real danger that must attend such a measure, I am confident that your zeal for the public

safety, will induce you to remove—not the trees from the streets of the city—but the 12th section from the bill before you.

I have but one thing more to add, and that is, that by the fifteenth section of your constitution, you are enjoined not to pass any law, except on occasions of sudden necessity, until the next session after the same hath been proposed and published for consideration. No such necessity appears in the present case: the roots and branches of these devoted trees will not increase to such a ruinous and enormous size between this and the next session of assembly, as to render immediate amputation necessary.

I would be far from supposing this honourable house, capable of malice or partiality—but must observe, that this bill hath been hurried through the forms of legislation with unusual speed. You have spent much precious time in considering whether A. or B. should sit for a certain time in a certain chair; but do not hesitate to doom to death, a number of quiet, harmless, and beneficent citizens, without remorse—without enquiry—without the common forms of justice.—

Here the orator ceased, and was dumb. The house was more surprised at the manner, than attentive to the matter of this curious speech. The question was put, and the clause passed without a dissenting voice—notwithstanding the importunate eloquence of this philosophic post.

SILVESTER.

August, 1782.



Laws of the Philadelphia society for promoting agriculture; as revised and enacted by the said society on the tenth day of January, 1786.

I. THE society shall be styled the Philadelphia society for promoting agriculture.

II. The society's attention shall be confined to agriculture and rural affairs: especially for promoting a greater increase of the product of land within the American states.

III. The society shall have a president, a vice-president, a treasurer, and a secretary: and an assistant secretary, when the increase of business shall require it; all of whom shall be annually elected, by the tickets of a majority of the members present at the stated meeting of the society in January; the persons so elected to continue in office one year, and until others shall be chosen in their stead. And in case of any vacancy, by death, resignation, or otherwise, the same may be supplied by a new election, to be made at any stated meeting of the society; the person thus newly elected to serve the remainder of the year.

IV. At all meetings of the society, the president shall exercise the usual duties of that office: all motions shall be addressed to him: and on all questions he shall collect and declare the votes. He shall also have power to call special meetings of the society, by notice published in at least two of the city newspapers. In his absence, the same duties shall be performed by the vice-president. And if it happen, at any meeting of the society, that both the president and vice-president be absent, the members present (being a quorum to constitute a regular meeting for the business to be transacted) may choose a vice-president for that meeting.

V. The treasurer shall keep the accounts methodically stated in the books of the society, and, when called upon, produce them for inspection. At the last meeting of every year, and also whenever his office ends, he shall produce a fair and regularly stated account of all receipts, payments, and expenditures, and deliver it, together with those books, and

all other property of the society in his hands, to his successor in office, or to the orders of the society.

VI. The secretary and his assistant shall have in charge all the books and papers of the society, and keep the same in exact order. They shall also register all letters which shall be written by the committee of correspondence, or by themselves by order of the committee.

VII. At the annual meeting of the society in January, shall be chosen a committee of correspondence, to consist of five members, any three of whom to be a quorum, for the purpose of corresponding with any other society, or persons, touching the objects which this society has in view. The same members shall also be a committee of accounts, to receive and adjust all claims against the society, for its contingent expenses, and give orders on the treasurer for payment.

VIII. The stated meetings of the society shall be on the first Tuesday of every month.

IX. The members of the society shall be distinguished into residing members, or members, and honorary members. The twenty three persons named when the society was first proposed to be instituted, and whose names are entered in the minutes of the eleventh of February, 1785, are members, according to the eighth article of the first laws of the society, enacted on the 15th of March, 1785. All members afterwards added to the society, were, and shall continue to be, of persons residing within a convenient distance to attend the meetings of the society at Philadelphia: and these are designed to be such only as, at the time of election, reside within ten miles of the said city, on either side of the Delaware. All members of agricultural societies in other states and countries, with whom we shall correspond, and all

persons of this state and of other states and countries who shall be elected by us for the purpose, shall be honorary members; and are hereby invited to assist at our meetings whenever they come to Philadelphia. Strangers who have a propensity to agriculture, and desire to be present as auditors, may be introduced by a resident member.

X. New members and honorary members shall be elected by the use of balls of two different colours; the one to be affirmative, the other negative to the question. And the secretary shall issue notice to each person of his being elected, to the following purport—On the day of 17 . A. B. of

was elected [a member or honorary member] of the Philadelphia society for promoting agriculture; the society inviting his assistance.

C. D. secretary.

XI. All elections and appointments shall be between eight and nine o'clock in the evening, at one of the stated meetings of the society. And no person shall be elected a member or honorary member, unless at the next preceding meeting he shall have been openly proposed, and such nomination duly entered on the minutes of the society. The nomination and election to be in the absence of the candidate.

XII. The society shall annually propose prizes, upon interesting subjects, relative to actual experiments and improvements, and for the best pieces written on proposed subjects. And in order most effectually to disseminate the knowledge of useful discoveries and improvements in husbandry, the society will, from time to time, publish collections of memoirs and observations, selected from such communications as shall be made to them. To promote these views, the friends of agricul-

ture are invited to assist the society with information of experiments and accidents in husbandry,

XIII. All claims of prizes shall be sent in writing; and when read, the society shall determine which of the claims, relative to each prize, shall be selected for their definite judgment, on a future comparison. This judgment is to be given at the stated meeting on the first Tuesday in February. If it happen, in any case, that there be no competition for a prize, but only a single claim, the society will consider such claim; and if the claims or claim, be supported answerably to the views and just expectations of the society, the prize proposed shall be decreed. Premiums and prizes are equally due to persons residing in any of the united states, according to the merit of their respective exhibitions.

XIV. For the purpose of defraying the necessary expences of the society, for premiums and prizes, books on agriculture, improved instruments of husbandry, and other important objects, and contingencies, every member shall annually pay to the treasurer a contribution of four dollars. This contribution shall be considered as due and payable at or before the last day of December in every year. And at the first meeting in January, the treasurer shall lay before the society a list of the members, specifying who have and who have not paid their contributions: and any member whose contribution shall be found to be more than one year in arrear, after the same shall have become due and payable as aforesaid, provided payment thereof has been personally demanded of him by the treasurer, or collector, authorized by him for the purpose, such member shall be considered as withdrawing from the society, and be no longer deemed a

member of it; and the same shall be entered in the minutes.

XV. New rules, or alterations to be made in old rules, shall be proposed, and the proposal entered in the minutes, at the next preceding regular meeting; and may then be made by no less than two-thirds of the members present, who shall not be fewer than thirteen, including the president or vice-president.

XVI. A quorum for ordinary business shall consist of at least five members, including the president or vice-president.

XVII. When any part of the society's funds is to be disposed of (excepting for ordinary contingent expences) the same shall be done at a stated or special meeting, after a notification of such intended appropriation has been published in two of the city newspapers, at least one week before such meeting shall be held, when thirteen members, including the president or vice-president, shall be necessary to constitute a quorum.

XVIII. Still farther to advance the objects of this institution, the society will promote the establishment of other similar societies in these states.

XIX. On the first meeting of the society in January, in every year, there shall be a revision of the then subsisting rules; and the same shall stand confirmed, so far as two-thirds of the members present, being at least thirteen, including the president or vice-president, do not revoke or alter them.

The following are the officers of the society for the present year:

PRESIDENT,

Samuel Powell, esquire.

VICE-PRESIDENT,

John Beale Bordley, esquire.

TREASURER.

Tench Francis, esquire.

SECRETARY,

Doctor Samuel P. Griffiths.

COMMITTEE OF CORRESPONDENCE,

Samuel Powell, esquire ;

George Clymer, esquire ;

Tench Francis, esquire ;

Robert Hare, esquire ;

John F. Miffin, esquire.



Premiums proposed by the Philadelphia society for promoting agriculture.

1. **F**OR the best experiment made of a course of crops, either large or small, on not less than four acres, agreeable to the principles of the English mode of farming—a piece of plate of the value of two hundred dollars, inscribed with the name and the occasion : and, for the experiment made of a course of crops next in merit—a piece of plate, likewise inscribed, of the value of one hundred dollars. Certificates to be produced by the 20th of December, 1790.

2. The importance of complete farm or fold-yards, for sheltering and folding cattle—and of a preferable method of conducting the same, for procuring great quantities of compost or mixed dung and manure, within the husbandman's own farm, induces the society to give, for the best design of such a yard and method of conducting it, suitable to this climate and circumstances of common farmers—a gold medal :—and, for the second best, a silver medal. The design to be presented to the society by the 20th of December next.

3. For the best method of counteracting the injurious effects of frost, in heaving or spewing up ground, and exposing roots of wheat

to the drying winds of the spring, founded in experience, a gold medal : and, for the second best, a silver medal. The account to be presented to the society by the 20th of December next.

4. For the best method of raising hogs, from the pig, in pens or sties, from experience, their sometimes running in a lot or field not totally excluded, if preferred ; a gold medal : and, for the second best, a silver medal. To be produced by the 20th of December next.

5. For the best method of recovering worn-out fields to a more hearty state, within the power of common farmers, without dear or far-fetched manures ; but, by judicious culture, and the application of materials common to the generality of farmers ; founded in experience ; a gold medal : and, for the second best, a silver medal. To be produced by the 20th of December, 1788.

6. For the best experiment, soil and other circumstances considered, in trench-ploughing, not less than ten inches deep, and account of the effects thereof, already made, or to be made, on not less than one acre ; a gold medal : and, for the second best, a silver medal. To be produced by the 20th of December, 1789.

7. For the greatest quantity and variety of good manure, collected in one year, and best managed, from materials common to most farms ; regard to be had to the proportion and goodness of such manure, and the quantity and goodness of the arable and grass-lands of the whole farm on which it is obtained, a gold medal : and, for the second best, a silver medal. To be claimed by the 20th of December, 1789.

8. For the best information, the result of actual experience, for preventing damage to crops by insects ; especially the Hessian fly, the wheat-

fly, or fly-weevil, the pea bug, and the corn chinch-bug or fly; a gold medal: a silver medal for the second best. To be produced by the 20th of December, 1788.

9. For the best comparative experiments on the culture of wheat, by sowing it in the common broad-cast way, by drilling it, and by setting the grain, with a machine, equidistant; the quantities of seed, and produce, proportioned to the ground, being noticed; a gold medal: for the second best, a silver medal. The account to be produced by the 10th of January, 1789.

10. For an account of a vegetable food that may be easily procured and preserved, and that best increases milk in cows and ewes, in March and April, founded on experiment; a gold medal: for the second best, a silver medal. To be produced by the 10th of January, 1789.

11. For the greatest quantity of ground, well fenced, in locust trees or poles of the sort used for posts and trunnels, growing in 1789, from seed sown after this time, not less than one acre, nor fewer than 1500 per acre, a gold medal: for the second, a silver medal. To be claimed in December, 1789.

12. The society believing that very important advantages would be derived from the general use of oxen, instead of horses, in husbandry and other services; and being desirous of facilitating their introduction into all these states; persuaded also, that the comparative value of oxen and cows must very much depend on the qualities of their fires and dams; and that by a careful attention to the subject, an improved breed may be obtained: they propose a gold medal for the best essay, the result of experience, on the breeding, feeding, and management of cattle, for the purpose of rendering them most profitable for the dairy, and for beef,

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and most docile and useful for the draught: and, for the next best, a silver medal. To be produced by the first of January, 1789.

N. B. Among other things, the essay should notice the different breeds of cattle, and their comparative qualities; as their sizes, strength, facility in fattening, quantity of milk, &c.

13. It is a generally received opinion, that horses in a team travel much faster than oxen: yet some European writers on husbandry mention many instances, in which it appeared, not only that oxen would plough as much ground as an equal number of horses; but also travel as fast with a loaded carriage; particularly when, instead of yokes and bows, they were geared in horse harness, with such variations as were necessary to adapt it to their different shape. To ascertain the powers of oxen in these particulars, and the expense of maintaining them, the society deem matters of very great moment; and are therefore induced to offer a gold medal for the best set of experiments, undertaken with that view; and for the next best, a silver medal. In relating these experiments, it will be proper to describe the age and size of the oxen, their plight, the kinds and quantities of their food, the occasions, manner, and expense of shoeing them; in travelling, the kinds of carriages used, and weight of their loads, the seasons of the year, and the length and quality of the roads: and, in ploughing, the size and fashion of the plough, the quality of the soil, the depth of the furrows, and the quantities ploughed: and, in every operation, the time expended, and number and sort of hands employed in performing it; with any other circumstances which may more fully elucidate the subject. These experiments will enable the essayist to determine what will be the

best form and construction of yokes and bows, and what of ox-harness, to enable oxen, with the best carriage of their bodies and heads, the most ease, and quickest step, to draw the heaviest loads, a description of each of which gears, explained on mechanical principles, must be subjoined to the account of the experiments: to be produced by the first day of January, 1789.

14. For the best method, within the power of common farmers, of recovering old gullied fields to a hearty state, and such uniformity, or evenness of surface, as will again render them fit for tillage; or where the gullies are so deep and numerous as to render such recovery impracticable, for the best method of improving them, by planting trees or otherwise, so as to yield the improver a reasonable profit for his expenses therein, founded on experiment; a gold medal; and for the next best, a silver medal: to be produced by the first of January, 1790.

15. For the greatest quantity, not less than five hundred pounds weight, of cheese, made on one farm in any of these states, equal in driness, richness, and flavour, to the Cheshire cheese usually imported from England, and which shall be produced to the society by the first day of January, 1789, a gold medal; and for the next greatest quantity, not less than two hundred and fifty pounds weight, of like quality, a silver medal. Besides which, the society engage to pay for the cheese so produced, at the rate of ten per cent. more than the then current wholesale price at Philadelphia, of Cheshire cheese, of the same quality.

16. For the best method, deduced from experience, of raising the American white-thorn from the seed for hedges, and the greatest number of plants raised in a space not less than half an acre, a gold medal: for the

second best, a silver medal. To be produced by the first of December, 1790.

17. The society believing that the culture of hemp on some of the low rich lands in the neighbourhood of this city, may be attempted with advantage, do hereby offer a gold medal for the greatest quantity of hemp raised within ten miles of the city of Philadelphia. The quantity not to be less than four acres: for the second greatest quantity, a silver medal.—The claim to be made by the first of December, 1788.

. The claim of every candidate for a premium, is to be accompanied with, and supported by, certificates of respectable persons, of competent knowledge of the subject. And it is required that the matters, for which premiums are offered, be delivered in without names, or any intimation to whom they belong; that each particular thing be marked in what manner the claimant thinks fit; such claimant sending with it, a paper sealed up, having on the outside a corresponding mark, and on the inside the claimant's name and address.

Respecting experiments on the products of land, circumstances of the previous and subsequent state of the ground, particular culture given, general state of the weather, &c. will be proper to be in the account exhibited. Indeed, in all experiments and reports of facts, it will be well to particularize the circumstances attending them. It is recommended that reasoning be not mixed with the facts: after stating the latter, the former may be added, and will be acceptable.

Although the society reserve to themselves the power of giving, in every case, either one or the other of the prizes (or premiums) as the performance shall be adjudged to deserve, or of withholding both, if

here be no merit—yet the candidates may be assured, that the society will always judge liberally of their several claims.

S. P. GRIFFITTS,
Sec'y.

Philadelphia, Feb. 5, 1788.



Report of the managers of the Pennsylvania society for the encouragement of manufactures and the useful arts: addressed to their constituents, January 18, 1788.

Gentlemen,

WE entered on the performance of the duties you assigned to us, under a strong conviction of their importance to the public welfare, and with a proportionate zeal to discharge them with effect. The short duration of our appointment, the novelty of the undertaking, and the extensive and complicated nature of the necessary enquiries, have prevented our making a progress correspondent to our wishes; but we flatter ourselves we have opened a path for our successors, and that with the information we shall transmit them, they will be enabled to fulfil effectually the views of the society.

Our first attention was paid to those articles, which, at the same time that they are suited to the resources of this country, and are called for by its necessities, have been hitherto overlooked or neglected: we have pointed out a variety of these to public notice, and have endeavoured by such honorary premiums as are suited to the funds of the society, to lead those persons who may be able to pursue such objects, to set a laudable example to their fellow citizens.

We have since made a general review of the arts and manufactures established here. In the course of

this enquiry, we have found that some important articles are rising to great perfection, and have precluded the necessity of importing them from foreign countries: many, we are sorry to say, are in a declining state, and some of these, without assistance and support, must inevitably be lost to this country. We have, nevertheless, the strongest reason to believe, that when, by the establishment of a general government, the clandestine importation of foreign articles shall be prevented, and that preference given throughout the united states to the manufactures of America, which the common interest demands, our established manufactures will resume their former vigour, and others be found to flourish which have hitherto been little known among us.

Having had reason to believe that the interposition of foreigners will be exerted to prevent the growth of our manufactures—we thought it our duty to join the manufacturing committee, in an application to government to counteract such injurious designs.

On the whole we are able to assure you, that it is probable much benefit will result to the public, from this institution, if it is duly supported: It will serve to collect an useful fund of information, for the service of the public, and of individuals; to distinguish those manufactures, which may be undertaken with success; to suggest means for their improvement and extension; and to become a centre of union to the manufacturing interest in general. Under the impression of these opinions, we recommend it to public patronage and support, as intimately connected with the future welfare of this country.

Signed by order of the board,
SAMUEL POWEL, v. pres.
Philadelphia, Jan. 18, 1788.

Attest, GEO. FOX, Sec'y.

A view of the principles, operation, and probable effects of the funding system of Pennsylvania—together with some observations on the effects of a sinking fund—tending to shew, that this state, by a proper application of her present resources, may redeem the whole capital of her funded debt in a few years.

“Public credit is public wealth.”

IT will be found, on a comparison of the state and circumstances of society and civil government, in former times, with their present situation and condition, that principles and maxims have become essentially necessary in well-regulated modern governments, which were but little known, or little regarded, till within the last two or three hundred years. Governments, in former times, were so organized, and so conducted, as to be little dependent on revenue systems. Disbursements from the public treasury were confined to a few objects, and its supplies drawn from the plunder of enemies, or irregular exactions from the people, which were generally partial and oppressive. Since the diffusion of knowledge, by the art of printing, the extension of commerce and navigation have opened new sources of public revenues, as well as of private wealth. The rights of mankind have been better understood. New ideas and new principles have pervaded the systems of government; and partial and oppressive exactions of property and personal services have given way to less inconvenient and more equitable modes of liquidating the public burdens; whereby contributions are better proportioned to the means of the respective members of the community. Hence the arrangement and administration of the public finances have become so important a branch of the business of

government, in all civilized countries, as to demand the most serious attention and systematic management.

The more free and liberal the government is, in other respects, the more closely ought this branch to be attended to, in the formation and observance of system in the collection and disposal of the public revenues; because, in free governments, public credit is not only necessary in a higher degree, but more dependent on a strict adherence to system in matters of finance, than in those that are more despotic. Experience has shewn that those nations which have the greatest degree of public credit, are the most powerful and the most respectable in proportion to their advantages in other respects. They can on any emergency obtain loans of money, on easy terms, to any amount they may have occasion for; and thus, by anticipation, bring into immediate use the revenues of future years; while nations, less careful to establish and preserve their public credit, are more circumscribed in their resources, being obliged on emergencies to raise money on terms of great disadvantage, or to be confined in their disbursements to little, if any thing, more than the concurrent produce of their revenues. And such supplies are always, when most wanted, either less productive or more burdensome than at other times.

Public credit is therefore public wealth. It is not only the surest, but, prudently managed, the least burdensome resource a government can rely on. It is the resource by which Great Britain hath been raised to her present astonishing degree of wealth and power; and by which our American revolution was effected, though we have since suffered it in a great degree to depart from us.

It is an important enquiry, in our present situation, how we shall repos-

“fess ourselves of this inestimable treasure. Difficulties may assail us in the attempt; but these difficulties cannot arise from the want of proper means. If we suffer them to give us any great obstruction, it must be in the modes of arranging and exercising those means which providence hath bountifully bestowed upon us. The late superintendant of finance, in his address to the public, prefixed to the statement of the accounts of his administration, makes the following just and pertinent observations. “No treason either has operated, or can operate, so great injury to America, as must follow from a loss of reputation. The payment of debts may indeed be expensive, but it is infinitely more expensive to withhold the payment. The former is an expense of money, when money may be commanded to defray it; but the latter involves the destruction of that source from whence money can be derived when all other sources fail. That source, abundant, nay almost inexhaustible, is public credit. The country in which it may with greatest ease be established and preserved, is America. And America is the country which stands most in need of it, whether we consider her moral or political situation; and whether we advert to her husbandry, commerce or manufactures. An hundred schemes are attempted for the introduction of a paper currency, which, if it could be effected, would only produce a little temporary relief to a few, and must involve the most extensive mischiefs to all; while the plain remedy for the evils complained of, is at hand, though neglected. A due provision for the public debts would at once convert those debts into a real medium of commerce. The possessors of certificates, would then become the

“possessors of money. And of course there would be no want of it among those who, having property, wish to borrow: provided that the laws and administration are such as to compel the punctual payment of debts. This subject would lead too far for the present purpose. But it must be observed that we are just emerging from a long and expensive war—a war more expensive than it ought to have been, because the needy can never economize, and because no degree of talents can compensate the want of experience.”

If revenues were established in America, adequate to the payment of the annual interest of the national debt, and these revenues so appropriated and applied, as to make such payment regular and certain, public credit would revive and flourish in full vigour. A sinking fund might easily be raised without additional burdens on the people, which in a few years would redeem the whole capital. And if, in the mean time, an approach of war or other emergency should require fresh provision, temporary revenues, equal to the annual interest of the sum required, would command the money whenever it should be wanted. This has been amply demonstrated by an experiment within our knowledge.—Great Britain has afforded us an example, by which we may derive the benefits, without incurring the evils of a funding system. Shortly after the revolution which placed the prince of Orange on the throne, the circumstances of Great Britain, in matters of finance, were little, if any better, than ours are at present.—Their debts were heavy, their credit low, and their revenues could not keep pace with current demands, exclusive of discharging former debts. The jacobites or opposers of the revolution were so numerous as to give

great obstruction to the wheels of government, and were watching opportunities to destroy it; while the whigs or revolutionists, being the principal public creditors, were too much exhausted to furnish the necessary supplies for maintaining the ground they had acquired. In this situation, their funding system was devised. They appropriated part of their revenue for the payment of interest, with some addition for a sinking fund for the discharge of the capital, and contracted new loans for such part of their current supplies, as the exigencies of the times required. But they were particularly careful to establish and appropriate revenues adequate to the payment of the interest of every loan they obtained, and generally such as afforded some surplus to strengthen and increase the sinking fund. By these means, though they at first paid so high an interest as eight per cent. they not only extricated themselves from the difficulties which then beset them, but gained strength to resist the successive attempts which were afterwards made to replace on the throne, the tyrant race they had expelled.

It has been objected to the funding system of Great Britain, that it has been the means of involving the nation in a most enormous debt, which probably would not otherwise have ever risen to the tenth part of the present amount. But it should be remembered that this consequence hath not flowed from the system itself, but from an abuse of it. If its first principles had been justly adhered to by a faithful application of the sinking fund, the whole capital might have been honourably redeemed in a few years of peace. But a well-funded national debt was considered as a bond of union, which added strength and stability to the government.—They were therefore the less in haste to discharge the principal, though they

paid the interest with punctuality. Had they kept it within moderate bounds, it might have been equally useful in this respect, and less inconvenient in others. But changes of men produced changes in the measures of administration. Ministers, who had the meanness to court popularity at the expense of the true interests of the nation, seized for current occasions the revenues provided for the sinking fund, under pretence of saving the people from taxes.—They “assumed apparent merit from real negligence, by feeding on the providence of their predecessors,” and thereby unjustly accumulated the burden which they successively rolled upon posterity. It is, however, an irrefragable argument in favour of the system, that it has enabled the nation to contract so deep a debt by the voluntary consent of her creditors, and with undiminished credit. Without such a system, the nation would probably have sunk into decay under the debts she had incurred, and the pressure of other circumstances: with it she has increased her credit and her means of payment, in proportion to the increase of her debt. The interest she pays is chiefly to her own citizens, which quickens the circulation of money, promotes agriculture and manufactures, and has extended her commerce and naval power to a degree beyond example.

[To be concluded in our next.]



BON-MOT.

AT a musical country meeting, a vocal performer (who was rather shabbily dressed about his *under garments*,) being complimented on the power of his voice—vainly threw up his head, and replied,—“O Lord, sir, I can *make any thing of it*.” Can you indeed? said a wit in the company—why then I’d advise you to *make yourself a pair of breeches of it*.

To the editor of the American Museum.

The following is a copy of a letter, written lately by a gentleman of my acquaintance to a friend of his, who had requested some directions on the reading of history. If you think it worthy of a place in your useful miscellany, be pleased to insert it, which will oblige

Your humble servant,

Kent county, Maryland, S. E.
4th Feb. 1788.

To I***** R*****, esquire.

THAT the human mind is like a garden, which, unless it be cultivated and made to yield flowers, will soon be over-run with weeds, is no new thought. Innumerable proofs might be adduced, to evince, that all created nature, spiritual as well as corporeal, is supported by a principle of activity. We look not for health in one who is confined to a dungeon, nor for virtuous exertion in the relaxed mind of an eastern despot. If, from the book of nature, we turn our eye to the book of revelation, we behold him, who was the perfect model of the human character, continually going about doing good. And if the idea be just, as both reason and inspiration teach, that we are but stewards, and not absolute lords, of whatever worldly goods or mental talents we may possess, it is assuredly our duty to improve them to the utmost of our power; that by employing them for the promotion of virtue and happiness among men, we may answer the views of him who entrusted them to us.

To prepare the human mind for virtuous action, to clear it from the rubbish of natural corruption, and to remove those impediments which, in its rude state, obstruct its beauty and usefulness, labour and diligent culture are necessary. By culture, how-

ever, the understanding and heart, though they must still be human, and consequently imperfect, may be greatly advanced above that degree in the scale of excellence, in which nature has placed them. How much clearness and strength may our intellectual powers acquire, by a course of mathematical investigation! What elevation may the mind of man derive, from the perusal of the book of nature and the splendid records of the government of providence! What justness of thinking may we acquire from the study of logic and a philosophical enquiry into the powers of the human mind! and what vigour may be added to every good principle, by contemplating, in a course of ethics, those engaging pictures of virtue, which experience sometimes, and imagination always, can furnish!

But I had almost forgotten that the intention of this paper was to give some hints upon the reading of history. This is a species of study which will justly claim the attention of those, who, having no profession in view, wish to blend pleasure with improvement.

If it be true, that experience is the mother of wisdom, history must be an improving teacher. In her school, we may learn that wisdom, which others have purchased in life at a dear rate. Under her direction, we may reap fruits, without partaking in the labour. History has been called a mirror; the reason of which, I conceive, is, that building on the immutability of the laws of nature, and reasoning from analogy, we are enabled from the past, to conjecture concerning the future—as, from appearances in a looking-glass, we infer the reality.

True history, therefore, must ever be improving: romances would be equally so, were they faithfully copied from nature; but as that can said of very few of them, they are to

be regarded in respect of true narrative, as the wanderings of the *ignis fatuus* compared to the steady course of the heavenly luminaries.

History may be divided into three kinds, natural, sacred, and civil.

Of the first, the province is external nature, animate, vegetable, and unorganized. Linæus, Buffon, and Goldsmith, are the most faithful delineators. The short path from the field of nature, to that of religion, has been opened and beautified by Ray, Derham, and the preachers at Boyle's lectures.

Sacred history treats of the progress of religion. As we believe the Jewish and Christian systems to be the only true ones which ever existed, we will not, if our aim be improvement and pleasure, pry into the lamentable scenes of delusion and error. On this subject, then, a layman will find all he would wish to know in the sacred pages of inspiration, Josephus's antiquities and history, and Mosheim's compendium.

Civil history has for its object the transactions and revolutions of empires, kingdoms, and nations. A complete and uninterrupted history from the origin of the world is not to be had, nor would it be of any great use. The several shining periods, in the annals of mankind, have been investigated by Thucydides, Livy, Hume, and Robertson; and such writers, like the splendid arbiter of the day, elicit the pure ore from the richer parts of this extensive mine, and diffuse a light through the surrounding regions. What is called the universal ancient and modern history, is, I conceive, a compilation like the dictionary of arts and sciences; and who would drink in the polluted stream, who can have recourse to the fountain? The first-rate historians, then, whose luminous pages alone, are entitled to attention from the votary of polite learning,

are generally known. Rollin's ancient history, Goldsmith's Greek and his Roman history, Ferguson's Roman history, Robertson's history of Charles V. his history of Scotland, and history of America (last edition) and Hume's history of England, claim superior notice. Gibbon is respectable as a historian, and may be read with profit, by one whose religious principles are established. A general chronological view of the more important events and eras since the creation, is proper; and some account of the later periods of the history of Europe and America, and of the topography of those countries' is necessary to prepare one for polite conversation.

Memoirs, voyages, and travels, form another species of history.— These are entertaining and highly instructive; as they represent nature on a lower scale, and more adapted to experience. Sully's memoirs, Brydone's and Moore's travels, and Anson's and Cook's voyages, are master-pieces in this way.

The knowledge of the human character, and of the mental powers, actions and various fortune of particular men, being still more closely connected with experience, is, in the highest degree, useful in the conduct of life; and in this view, Plutarch's lives may be esteemed one of the most entertaining and most instructive books in the world. The paintings of Homer, Shakespeare, and Milton, afford, likewise, excellent lessons in the history of moral nature.

These authors, in copying, truly represent the blemishes with the beauties. The book of inspiration, only accounts for these imperfections, describes their progress and tendency and proposes the remedies; and for this reason, it is entitled to the first place among the histories of the human mind, as well as of religion.

December 17, 1787.

SELECT POETRY.

The sea-faring bachelor.—By mr. Philip Freneau.

SO long harrafs'd by winds and seas,
'Tis time, at length, to take your ease,
And seek a bride : for few can find
The sea a mistress to their mind.

In all your rounds 'tis wond'rous strange
No fair one tempts you to a change :
Madness it is, you must agree,
To lodge alone till forty three.

Old Plato own'd, no blessing here
Could equal love— if but sincere :
And writings, penn'd by heav'n, have shewn
That man can ne'er be blest alone.

O'er life's meridian have you past ;
The night of death advances fast !
No props you plant for your decline,
No partner soothes these cares of thine.

If Neptune's self, who rul'd the main,
Kept sea-nymphs there to ease his pain ;
Yourself, who skim that empire o'er,
May surely have one nymph on shore.

Myrtilla fair, in yonder grove,
Has so much beauty, so much love—
That on her lip, the meanest fly
Is happier far than you or I.



The seasons moralized.—By the same.

THEY who to warmer regions run
May bless the favour of the sun
But seek in vain what charms us here,
Life's picture varying with the year.

Spring and her wanton train advance,
Like youth, to lead the festive dance :
All, all her scenes are mirth and play ;
And blushing blossoms own her sway.

The summer next (those blossoms blown)
Brings on the fruits that spring had sown :

Thus men advance, impell'd by time,
 And nature triumphs in her prime.
 Then autumn crowns the beauteous year,
 The groves a sicklier aspect wear;
 And mournful she (the lot of all)
 Matures her fruits to make them fall.
 Clad in the vestments of a tomb,
 Old age is only winter's gloom—
 Winter, alas! shall spring restore,
 But youth returns to man no more.

The Brandywine.

YE sprightly dryads of this pleasing shade*
 And all ye sisters of the sacred nine!
 My infant muse invokes your pow'rful aid,
 To sing the beauties of the Brandywine.

Ye lovely naiades of this crystal stream,
 Who, festive, sport upon its limpid tide—
 And thou, Apollo, deign to grace my theme;
 Give ear, and o'er each line and verse preside.

Ye sylvan gods, and genii of the woods,
 Which skirt its steep and rocky banks along,
 And all ye nymphs, who bathe in lucid floods,
 Assist and raise in softest notes my song.

Ye wanton loves, who flit around in air,
 Pellucid fays, thro' whom the sun-beams shine,
 Attentive listen to my ardent pray'r,
 And aid me to describe the Brandywine.

At first it oozes from its distant source,
 The god there gently pours it from his urns:
 It bends among the cragged rocks its course;
 And lowly round in wild meanders turns.

No naiad yet to him her tribute pays;
 For many a mile alone it humbly roams:
 At length a thousand rills its waters raise,
 And o'er each steep impetuously it foams.

Nor selfish does it pass unnotic'd by;
 Thro' wide canals it glides serene and still.
 The stream, conducted from its course, on high,
 Is taught to turn full many an useful mill.

NOTE.

* The place here particularly alluded to, is a point of woods a little below Brandywine bridge.

Look where you will, in ev'ry stage
Of this degen'rate, wicked age,
Whether in high or lower life,
Each man is govern'd by his wife.

If you believe not what I say,
We'll prove it by the following way:
Five horses in my stable stand,
As good as any in the land;
Five hundred eggs, to bear them part,
I'll likewise put into a cart;
With these the country you shall trace,
And walk about each town and place;
Strictly enquire at ev'ry house,
Who is it governs, man or spouse?
At ev'ry house where 'tis confest,
'The man is master—leave a beast:
But where the wife is millrefs—see
To leave an egg; and if it be,
The hundred eggs are sooner spent,
To take my daughter I'm content.

The son departs—first house in sight
He visited in merry plight:
But there 'he found, 'twas all uproar,
“You lubber, go and ope the door.”
He left an egg, and then proceeded,
Fretting he had so ill succeeded.
With this ill luck he travell'd o'er
Some twenty towns, I think, or more;

Now where a stately mansion stood,
Hither our carter quickly rode—
And soon alighting at the gate:
Enquired for the master strait.
The gentleman was yet in bed,
But to the lady he was led.
When seated, he without much force
Of compliments began discourse:
“To ask a question's all I want,
And beg that you will deign to grant
A faithful answer;—'tis to know
Whether your husband rules or no?”

An answer soon the lady had,
Which made our 'squire's heart full glad;
“Why, sir, I'm not asham'd to say
My husband always I obey.”

The husband came and being seated,
The business was again repeated;
And after compliments were paid,
Confirm'd each word his wife had said:

Our hero, without saying more,
Took both his friends unto the door;
And begg'd they'd take, without much words,
The best horse which his team affords.
A black one struck the husband's fancy,
But then it did not please his Nancy:
She urg'd with energetic force,
"The grey mare was the better horse."
The husband many reasons gave,
Why he the black horse wish'd to have:
But nought would do: ma'am had her way,
And in a passion did she say:

"You shall have that!"—"Well," said the man,
"You'll please yourself, do all I can;
Since 't must be so."—"Stop," says the squire,
"Instead of that, I must desire,
You'll take an egg; and I of course
Must travel homeward with my horse;
For now I see, throughout their lives,
All men are govern'd by their wives."

*Evil company.*

THE garden breath'd a sweet perfume,
And all was beauty, all was bloom:
Th' orient sun unclouded shone,
And Flora's gayest robes were on:
Health was convey'd on ev'ry breeze,
The richest blossoms cloth'd the trees.
Hope sprung to think, that autumn's store
Would crown whate'er appear'd before:
When sudden rose a killing eastern blast,
And lo! the golden prospect all at once was past.

See you that youth, whose happier days
Inspir'd each gen'rous mind with praise—
Whom careful Culture's prudent hand
Had taught his passions to command—
Whose manners spoke a gentle heart,
Beyond the reach of modern art?
Where'er in those blest years he came,
He still excited friendship's flame;
Each candid eye beheld him with delight,
When Folly's noxious air produc'd a fatal blight.

*The dying Indian, or the last words of Shalum.**By mr. Philip Freneau.*

ON yonder lake I spread the sail no more !
 Vigour, and youth, and active days are past :
 Relentless demons urge me to that shore,
 On whose black forests all the dead are cast.
 Ye solemn train, prepare the fun'ral song ;
 For I must go to shades below,
 Where all is strange, and all is new—
 Companion to the airy throng,
 What solitary streams,
 In dull and dreary dreams,
 All melancholy, must I rove along ?

To what strange lands must Shalum take his way !
 Groves of the dead, departed mortals trace.
 No deer along these gloomy forests stray,
 No huntsmen there take pleasure in the chase :
 But all are empty, unsubstantial shades,
 That ramble through those visionary glades :
 No spongy fruits from verdant trees depend,
 But sickly orchards there
 Do fruit as sickly bear :
 And apples a consumptive visage shew,
 And wither'd hangs the hurtle-berry blue.
 Ah me ! what mischiefs on the dead attend.

Wand'ring a stranger to the shores below,
 Where shall I brook or real fountain find ?
 Lazy and sad, deluding waters flow—
 Such is the picture in my boding mind !
 Fine tales, indeed, they tell
 Of shades and purling rills,
 Where our dead fathers dwell,
 Beyond the western hills :
 But when did ghost return, his state to shew—
 Or who can promise, half the tale is true ?

I, too, must be a fleeting ghost—no more—
 None—none but shadows to those mansions go :
 I leave my woods—I leave the Huron shore—
 For emptier groves below !
 Ye charming solitudes,
 Ye tall, ascending woods,
 Ye glassy lakes, and prattling streams,
 Whose aspect still was sweet,
 Whether the sun did greet,
 Or the pale moon embrac'd you with her beams—

Adieu to all !

To all that charm'd me where I stray'd,
The winding stream, the dark sequester'd shade ;
Adieu all triumphs here !
Adieu the mountain's lofty swell,
Adieu, thou little verdant hill,
And seas, and stars, and skies—farewel,
For some remoter sphere !

Perplex'd with doubts, and tortur'd with despair,
Why so dejected at this hopeless sleep ?
Nature at last these ruins may repair,
When death's long dream is o'er, and she forgets to weep.
Some real world once more may be assign'd,
Some new-born mansion for th' immortal mind !
Farewel, sweet lake ! farewel, surrounding woods !
To other groves through midnight glooms I stray,
Beyond the mountains, and beyond the floods,
Beyond the Huron bay.
Prepare the hollow tomb, and place me low,
My trusty bow and arrows by my side,
The cheerful bottle, and the ven'son store ;
For long the journey is, that I must go,
Without a partner, and without a guide.

He spoke : and bid th' attending mourners weep :
Then clos'd his eyes—and sunk to endless sleep.



To scandal.

ENLIV'NER of the vacant hour,
When Sense and Candour lose their pow'r,
Dear Scandal, Envy's darling child,
Of callous heart, yet aspect mild,
But for thy aid how tasteless all
We meek-ones conversation call ?
Falsely by man thou'rt said to be
President o'er our harmless tea ;
That fav'rite post you now resign,
To reign triumphant o'er his wine.
Sick'ning as sweet, the draught would be,
But for the acid mix'd by thee ;
That sharp infusion adds a zest
To ev'ry tale and ev'ry jest. D E L I A.

An answer to the riddle in the last Museum.

From the Pennsylvania Magazine.

FATIGU'D, I sat by fire side:
 The watchman "*past elev'n*" had cri'd.
 I call'd for *Betty*; yawn'd, and said:
 " I'm sleepy—light me up to bed."
 Suppose me at the toilet plac'd,
 With cap unpin'd, and stays unlac'd;
 While *Betty*, to prevent the spieen,
 Regales me with the magazine.
 " See here's a riddle, ma'am—no doubt
 " But you or I can find it out."
 She read it o'er and o'er again,
 I guess'd—she guess'd—but all in vain.
 And after mighty toil and trav'l,
 Could not the mystery unrav'l—
 " Why, *Betty*, sure I'm very dull."
 " La! ma'am, I've almost crack'd my scull—
 " What can it mean?—it is—poh—fiddle,
 " No, 'tis not that—confound the riddle!
 " Yes, now I have it, past a doubt—
 " Madam, I've found the secret out—
 " Here 'tis—the very thing I handle—
 " 'Tis this same spermaceti candle."

Philadelphia.

EUDOCIA.



To a man of lively, but unequal spirits in conversation.

A FLARING light fatigues and hurts the eye:
 In lifeless shade we nothing can descry.
 Avoid extremes: an universal rule!
 Though rarely understood by any fool.
 Incessant laughers weary me: but then,
 I tire alike of dull and gloomy men.
 Your gloomy men, who frown at harmless glee,
 Were never made, my friend, for you or me.
 Yet still, 'twere better to be sometimes dull,
 Than of smart things to seem for ever full.
 A clever fellow!—He, who courts that name,
 Of solid sense will scarce insure the same.
 Good-humour, ease, and just remark between,
 In conversation form the happy mean.

FOREIGN INTELLIGENCE.

St. Petersburg, October 30.

ON Sunday last a messenger arrived here from prince Potemkin, with the news of a victory obtained over the Turks, at an attack which they made upon Kinburn, on the night of the 11th instant, by a detachment of 5000 men, who landed near that fortress from Otschakow: and altho' the garrison was inferior in number, upwards of 4000 Turks were killed or wounded, and the remainder with difficulty escaped to their boats. The number of slain and wounded on the side of the Russians did not exceed 400, but several officers lost their lives on this occasion, and gen. Suqwarow and Reck, who had the principal command, were dangerously wounded.

Upon the arrival of this agreeable intelligence, te Deum was sung in all the churches of this capital, and the cannons were fired from the fortresses.

Amsterdam, November 16.

We are employed here in accomplishing the reform of our former constitution. A placard has been published, containing the dismissal of those officers who were chosen by the burghers; among them is colonel Isaac Van Gendover, 40 captains, 38 lieutenants, and 33 ensigns. They are styled, "those who were illegally appointed to be officers, since February the 21st, 1787."

Hague, November 21.

The following are some of the particulars of the news received from Bois le Duc. That place had been hitherto preserved from pillage, while other towns exhibited many scenes of plunder and outrage. But a new garrison having entered, the military, as they had done at other places, were guilty of great excesses, an example the mob soon began to follow. The riots be-

gan on the 5th instant, by breaking the windows of several houses—the plunder soon became general—many citizens, merchants as well as others, were robbed of all their gold, silver, moveables, merchandize, dress, plate, &c. This horrid outrage lasted for three days successively. The same riots took place in some towns of Zealand, partly occasioned by the military, and partly by the populace. Zuriczee is almost entirely ruined.

Dec. 19. Their high mightinesses have unanimously resolved to enter into an alliance of the defensive kind with the courts of Berlin and London.

Vienna, November 10.

Preparations for war are in no respect discontinued; and it is believed, that our sovereign will immediately set out for Hungary.

By the emperor's orders, all the women and children are removed from Semlin; and from numberless circumstances, we are convinced that his imperial majesty is inflexibly determined vigorously to prosecute the war against the Turks.

Dublin, October 11.

The idea of building docks on the western and southern coasts of this kingdom, is said to be a measure of the British minister. We sincerely hope, that the report of an intention to prosecute it to effect, may be founded in fact. It would be of essential service to the general interests of the empire; but in war, particularly, Great-Britain would experience the utility of such an undertaking. There are many parts where there is a depth of water sufficient for the largest ships in the navy.

St. James's, November 2.

His majesty, in council, was this day pleased to declare George, mar-

quis of Buckingham, lieutenant-general and general governor of his majesty's kingdom of Ireland.

London, November 5.

Mr. Pitt sent a letter this forenoon to Mr. Newland, director of the bank, to acquaint him, that all preparations for war between France and England, were immediately to cease on both sides.

The state of Utrecht has published an order, requiring all the armed societies and volunteers of the province, to lay down their arms, cockades and colours, within twenty-five days. Those who refuse, to be punished.

A letter from Paris, dated October 25, says, "Advices from Constantinople, dated September 22, inform us that the Ottoman court has at present 30,000 men near Oczakow, but we do not think much of this numerous army; and at the departure of the courier, we did not hear they had as yet attempted any thing. The French ministry hope, in the course of the winter, to effect a reconciliation between the Porte and Russia.

"France, at this moment, possesses 61,000 sailors; in 1778, she had 87,347. She has in the ports of Brest, l'Orient, Rochefort, and Toulon, one ship of 118 guns, five of 110, six of 80, twenty-three of 74, two of 64, one of 60, and one of 50; and if we add to those, one of 118 guns, and one of 74 on the stocks, they will form in the whole 41 ships of the line."

November 17. The largest ship that ever was built for the service of the East India company, was launched on Saturday at Blackwall. This ship is built on the bottom of the Ceres, and is of the vast burden of 1162 tons, bound to Madeira and China, and is to proceed under the command of captain Price.

Nov. 30. The French King has sent out orders to Bethune, to form

a particular legion of the Dutch patriots, who have retired from Holland—and who are to be taken into the immediate pay of France.

The new French council of war have given it as their opinion, that the army of France ought to be kept full and complete to the number 200,000 men; in consequence of which, the necessary orders have been issued for completing that number.

The protestant Swiss cantons have agreed to enter into the Germanic league.

One good effect arises to the French from their present embarrassments. The government are turning their eyes towards reformation in every department. Mr. Guibert, who was made secretary to the newly instituted council of war, has given in a plan to the archbishop of Thoulouse, by which a saving will be made of 34 millions in the army, which he nevertheless proposes to increase to the number of 280,000 men, at the same time that he augments the pay of the soldier.

The tobacco-trade has puzzled the ministry not a little, especially with the instance of sir Robert Walpole, who endeavoured to bring that article under excise, but was not able to accomplish it; nor has it ever been attempted since that time, which is now 54 years ago.

Nov. 23. The court of France are seriously become mediator between the Ottoman Porte and Russia, and have invited our court to join them.

An express arrived on Wednesday morning from Vienna, with the news that the emperor had given orders for the immediate march of his troops against the Turks. No formal declaration of war had yet taken place, but it was hourly expected.

Nov. 24. The empress of Russia makes the present war with the Turks wholly a land one, on account of the very extravagant expences that attend her keeping a naval establishment on

foot at so great a distance from any of her own ports. If her arms should, however, receive a check in the Crimea, of any importance, a diversion must of necessity be made on the other side, which will oblige her to send a squadron, and that a powerful one, into the Mediterranean.

Nov. 27. On Thursday, information was received by the minister, that the French had issued orders for disarming, and that several of their ships were dismantled. In consequence of this, expresses were sent on Friday last, to Portsmouth and the other ports, to disarm, which will begin to be done immediately.

Nov. 29. The last letters from Virginia brought over great remittances to the merchants here, and likewise orders for as much goods as will load ten ships, which are to be got ready immediately, in order that the ships may sail before Christmas.

Extract of a letter from Versailles, dated November 23.

"It having been determined in council, on Sunday night, that the king should meet his parliament the next day, his majesty set out from Versailles, at eight o'clock on Monday, and arrived at the palais in Paris about nine, when the peers, presidents of parliament, and counsellors of state, attended to receive him. His majesty carried with him two edicts to be registered; the one for a new loan, the other for the re-establishment of protestants in all their ancient civil rights.

"Permission having been announced to the assembly, that every member should deliver his sentiments without restraint, a debate ensued, warmly supported in its favour, and against it, which lasted till six o'clock in the evening; when his majesty, observing the general opinion was registering the edict, tired with the debate, and pressed by hunger, he rose and ordered it to be registered. The duke of Or-

leans arose, and protested against the proceedings of that day. His majesty, astonished, repeated his orders, and left the assembly, and arrived about seven o'clock at Versailles to breakfast.

"Tuesday, the duke of Orleans was exiled to his seat at Ville Cottarel, and the abbe Sabatier and another member of parliament sent to prison; the first to Mont St. Michael in Normandy, the second to Hamp, in Picardie.

"On Wednesday, the parliament waited on his majesty at Versailles, to acquaint him that the resolution entered on their books on Monday, was expunged."

Nov. 30. On the 22d instant, the king of France banished another prince of the blood (besides the duke of Orleans;) but it is not certainly known who he is. Some advices say, it is the prince de Bourbon, and others say, it is the prince de Conde: His majesty has also banished six of the presidents. These violent measures have raised such a ferment, and such a spirit in the parliament of Paris, that they have absolutely refused to resume their functions, until the banished members are restored. The contention between the parliament and the king is now at issue.

Dec. 6. Last Saturday's gazette revokes the late proclamation, requiring the immediate return of half-pay officers engaged in foreign service—and extends their continuance abroad to their former leave of absence, granted before the late appearance of hostilities between France and this country.

The slave trade, so long a disgrace to every civilized people concerned in it, is likely to become a subject of parliamentary investigation; and we hope, from the enlightened characters who have taken the matter up, that the conclusion of it will be such, (either by a total stop being put to it, or, if that should be found impolitic,

by an effectual remedy of its present inhuman practices) as must reflect honour to the nation, and to the party who may bring it forward.

A letter from Paris, dated Nov. 29, says, "a deputation from parliament waited on his majesty, on Tuesday last, with a fresh petition in behalf of the duke of Orleans and messieurs Sabatier and Fretot. The king's answer was as laconic as the first. In regard to the duke he had nothing to add; and for the two counsellors, one was gone to the place of his destination (Fretot to Orleans) and the other might be conveyed to a more healthy and not so distant a place as Fort St. Michael, on account of his dangerous situation; l'abbé Sabatier is extremely ill."

Dec. 15. A letter from Paris, dated December 9, says, "the parliament of Paris met on Friday, to deliberate on his majesty's edict, for the establishment of protestants in this kingdom: after sitting until near six o'clock in the evening, the affair was referred to a committee, who are to make their report on the good or bad effects which may arise from this edict. Some further representations were agreed to be made to the king, on the exile of the duke of Orleans, and the imprisonment of the two members of parliament."

Dec. 16. The king of France has ordered 200,000 livres to be issued for the relief of the Dutch patriots, who have been obliged to fly their country.

Dec. 21. The treaty of alliance between England, Holland and Prussia is in great forwardness; on which subject, sir James Harris has lately held frequent conferences with the states-general; and from his abilities, there is little doubt but to the honour and advantage of this country.

A letter from Rome, dated Dec. 5, says, "the barbarian pirates have commenced a very serious attack on the trade and commerce of the ecclesiastical state; the sovereign pontiff, at

the desire of some of the principal merchants, has ordered to fit out four more frigates, La Caserta of 26, Il Roma of 24, La Prudente of 24, and La Sybille of 20 guns, to protect the coast and the trade, which these invaders seem bent on destroying, if possible. The corsairs of Tunis and Algiers have already done much mischief, which it has become highly necessary to prevent in future."

Dr. Inglis, now bishop of Canada, hath actually put in his claim for the zool. left by the benevolent Martin Benson, to the first bishop that should be sent to and settled in North America.

Mr. Hastings's trial at the bar of the house of lords, will certainly commence early in the month of February next.

Paris, December 16.

All the French merchants and manufacturers bitterly complain of the fatal effects of the commercial treaty with England, whereby our trade is totally ruined, while that of Britain is in a flourishing condition. It is impossible that peace can be of a long continuance from an infinity of reasons. Besides this disastrous treaty for France, the troubles in Holland appear likely to produce the most serious consequences.



AMERICAN INTELLIGENCE.

Augusta, January 5.

WE have the pleasure to announce to the public, that on Wednesday last the convention of this state unanimously ratified the federal constitution in the words following, viz.

State of Georgia.—In convention.

Wednesday, January 2, 1788.

WE, the delegates of the people of the state of Georgia, in convention met, have taken into our serious con-

sideration the federal constitution, agreed upon and proposed by the deputies of the united states in general convention, held in the city of Philadelphia, on the seventeenth day of September, in the year of our Lord one thousand seven hundred and eighty seven, have assented to, ratified, and adopted, and by these presents do, in virtue of the powers and authority to us given by the people of the said state, for that purpose, for and in behalf of ourselves and constituents, fully and entirely assent to, ratify, and adopt the said constitution, which is herewith annexed, under the great seal of the said state.

DONE in convention, at Augusta, in the said state, on the second day of January, in the year of our Lord one thousand seven hundred and eighty-eight, and of the independence of the united states the twelfth.

Charleston, (S. C.) January 16.

Extract from the minutes of the house of senate, January 14, 1788.

Resolved unanimously, That the thanks of this house be given to the delegates of this state, in the convention holden last year, in the city of Philadelphia, for their great attention to, and faithful discharge of, the duties of their appointment.

Last Friday, in the house of representatives, mr. Rutledge, as chairman of a committee appointed to consider the governor's message, reported, that they had deliberated upon the new federal constitution, and were unanimously of opinion to recommend that the house should come to a resolution for calling a convention of the people, to consider the same.

Jan. 17. Yesterday, the house of representatives, in a committee of the whole, debated on the federal constitution till four o'clock. Mr. Loundes stood alone in disapprobation of it.

Boston, January 24.

On Friday last, the convention voted, that the following question be put to the honourable E. Gerry, esq, viz. "why, in the last requisition of congress, the portion required of this state, was thirteen times as much as of Georgia, and yet we have but eight representatives in the general government, and Georgia has three?" and requested him to put his answer in writing.

The next day, the honourable mr. Gerry answered the above question, as follows, viz.

Saturday morning, 19th Jan.

SIR,

"I have no documents in Boston, and am uncertain whether I have any at home, to assist me in answering the question, "why, in the last requisition of congress, the portion required of this state, was thirteen times as much as of Georgia, and yet we have but eight representatives in the general government, and Georgia has three?" but if my memory serves me, the reason assigned, by the committee who made the appointment, for giving such a number to Georgia, was, that that state had of late greatly increased her numbers by migration—and if not then, would soon be entitled to the proportion assigned her. I think it was also said the apportionment was made, not by any fixed principle, but by a compromise. These reasons not being satisfactory, a motion was made, on the part of Massachusetts, for increasing her number of representatives, but it did not take effect.

I have the honour to be, &c.

E. GERRY.

Hon. mr. Cushing,
vice-president of the convention.

Pittsburgh, February 2.

By a gentleman who arrived here on Wednesday, from Sandusky, we are informed, that the Indians are determined to oppose the settlement of the

country west of the Ohio. This gentleman further informs us, that their attendance on the treaty to be held next spring, will, in a great measure, depend on the persons sent to them: as, without the greatest attention being paid to them, their principal chiefs will not attend.

Feb. 9. The messengers appointed to invite the different tribes of Indians to the treaty that is to be held in May next, will set out in a few days for that purpose.

Wilmington, February 6.

At a meeting of justices, at Clowe's tavern, in the county of Sussex, on the 2d inst. after business was over, a riot arose between the parties called whigs and tories, which continued for some time with great violence, with fists and cudgels. We are sorry to hear that such occurrences are exceedingly frequent in that county.

New-York.

Feb. 7. By the latest advices from the Bay of Honduras, we learn that the settlements have been visited by a dreadful mortality; which, since the late hurricane, has carried off upwards of fifty white people, and a much greater number of negroes.

On the 6th ult. two men, named Rogers and Queeling, and a lad named Bennet, were killed and scalped by a party of 13 or 14 Indians, in Midway settlement, about 12 miles on the other side of Great Ogechee ferry, Georgia; the horses on which the two men rode, were also shot dead, and two negro boys are missing, supposed to be carried off by the savages.

It has been judged, that the weather on Tuesday was as severe as the cold day about fourteen years since; in the course of forty-eight hours the North-river froze so hard that a number of persons yesterday walked almost over upon the ice.

Philadelphia, February 7.

The legislature of North-Carolina at their late session, have resolved unanimously, "that the citizens of that state and the united states, have a full and indisputable claim to the navigation of the river Mississippi, as well by the clear and express stipulations of treaties, as by the great law of nature." They also resolved, at the same time "that the delegates of that state be instructed to move in congress for a full and explicit declaration, that the right which the united states, and each of them, have to the navigation of the Mississippi, is absolute and inalienable in order that the apprehensions and fears of their fellow citizens on that subject, might be entirely removed."

A letter from New-Orleans, dated November 7, 1787, says, "I have often mentioned the rapid increase of this country, and the happy government we enjoy. Hardly a packet arrives from Spain but what brings some fresh encouragement. Fine lands are graciously granted to new settlers, and their produce is taken by government paying a handsome price in hard dollars."

"A report is now confidently talked of, which, from the generous sentiments of a certain public character who represents us in New-York, people in general believe.

"You, however, who still entertain strange prejudices of us, will hardly give credit to it, but I venture to assure you, that a toleration of all persuasions will soon take place with us, and that nothing but industry and good behaviour will be expected by our liberal king.

"We well know the regard paid in Madrid to the opinion of the character alluded to, and we flatter ourselves that he will fix upon such measures with the united states, as will make the two countries happy through a valuable commercial connexion, which

will undoubtedly make both respectable to all others."

Feb. 16. A letter from a gentleman in Boston, dated February 8, says, "I have the pleasure to inform you, that our convention this day ratified the constitution, by a majority of 187 against 168. The minority are moderate; and say they will with alacrity support the government."

Feb. 13. Tuesday the 5th inst. in this city, the thermometer fell to 6 degrees below 0, that is, 38 degrees below the freezing point. This is a degree of cold seldom met with so far to the southward as Philadelphia. Perhaps a more sudden change was never known in this or any other country; for the day before it stood at 6 degrees above freezing. Hence it must have fallen 42 degrees in the space of 17 hours—an extraordinary phenomenon indeed!

Feb. 19. A letter from London, dated Dec. 19, says, "I have this day received a letter from the consul at Algiers, sent me from the secretary of state, informing that Zaccheus Coffin, who was taken in his passage from Dunkirk to Philadelphia, by an Algerine cruiser, died at Algiers, the 2d of last month, of a decay of his lungs. It appears, by the account received, that he was taken as good care of, as could be expected in that country. Perhaps some information of this ought to be made public, as the consul has been improperly treated in some of your papers, when I have good reason to conclude, he has been kind to such Americans as have had the misfortune to fall into their hands."

Feb. 27. A motion was lately made and seconded in the house of representatives of South-Carolina, that leave be given to bring in a bill to authorize the importation of negroes. On

the question being put to agree to the same, it passed in the negative.

MARRIAGES.

MARYLAND:

In Baltimore, John Coulter, esquire, to miss Polly M'Casky.

RHODE-ISLAND:

At Providence, Mr. John Francis, late of Philadelphia, to miss Abbey Brown.

NEW-YORK CITY:

Mr. John Wood, to miss Betsey Simmons.

DEATHS.

ENGLAND:

The right reverend father in God, Richard Lowth, lord bishop of London.

VIRGINIA:

At Chesterfield, Mrs. Tucker, consort of St. George Tucker, esquire. In Prince-Edward county, Mr. Peter Johnston. Near Williamsburg, Mrs. Susanna Shields, consort of Major James Shields. In Richmond, hon. Bolling Starke, esquire.

MASSACHUSETTS:

In Boston; Benjamin Lincoln, esquire, son of General Lincoln. Dr. Adams, son of the hon. Samuel Adams, esquire.

NEW-YORK CITY:

Mrs. Saidler, consort of Mr. James Saidler.

MARYLAND:

In Baltimore, Mr. James Hayes.

PENNSYLVANIA:

In Philadelphia, Mr. Edward Few, of Southwark. In Reading, Mrs. Rebecca Broadhead, consort of General Broadhead.

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T H E
A M E R I C A N M U S E U M :
O R
R E P O S I T O R Y

OF ANCIENT AND MODERN
FUGITIVE PIECES, &c,
PROSE AND POETICAL.

For MARCH, 1788.



..... "With sweetest flow'rs enrich'd,
"From various gardens cull'd with care."

..... "Colletta revirescent."



V O L. III. No. III.



THE SECOND EDITION.

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M,DCC,LXXXIX.

T H E
A M E R I C A N M U S E U M,

For M A R C H, 1788.

Observations upon an hypothesis for solving the phenomena of light: with incidental observations, tending to shew the heterogeneousness of light, and of the electric fluid, by their intermixture, or union, with each other. Communicated to the American academy of arts and sciences, by James Bowdoin, esq. president of said academy, and late governor of the state of Massachusetts.

IN reviewing some letters I had written to a philosophical friend, dr. Franklin, there occurred, on the subject of one of them, some observations, which appeared to me new. They are principally contained in the two last of three memoirs, which I shall lay before the academy: to whose judgment it will be submitted, whether they have any thing beside their novelty to recommend them.

As they were occasioned by considering dr. Franklin's queries concerning light, the strictures on those queries, as being introductory to the observations, will make a part of these memoirs.

The first memoir will accordingly contain a few strictures, or cursory remarks, on his hypothesis for solving the phenomena of light: with incidental observations concerning the heterogeneousness of light, and the electric fluid.

It is offered in full confidence, that our celebrated countryman, whose happy genius has contributed so largely to the advancement of philosophical knowledge, will be pleased with any attempt for that purpose, whether successful or not, even though it should be upon principles, that may not perfectly harmonize with some of his own.

The doctor, dissatisfied with the received doctrine concerning light, offers several objections to it, in the form of queries; and, in the same form, proposes an hypothesis of his own: both of which will be considered.

With respect to the hypothesis, it is asked—* “May not all the phenomena of light, be more conveniently solved, by supposing universal space filled with a subtle elastic fluid, which, when at rest, is not visible, but whose vibrations affect that fine sense in the eye, as those of air do the grosser organs of the ear? We do not, in the case of sound, imagine that any sonorous particles are thrown off from a bell, for instance, and fly in strait lines to the ear: why must we believe that luminous particles

NOTE.

* See letters and papers on philosophical subjects, page 265. edit. 1769.

leave the sun, and proceed to the eye? Some diamonds, if rubbed, shine in the dark without losing any part of their matter. I can make an electrical spark as big as the flame of a candle, much brighter, and therefore visible further; yet this is without fuel: and I am persuaded no part of the electric fluid flies off in such case to distant places, but all goes directly, and is to be found in the place to which I destine it. May not different degrees of the vibration of the above-mentioned universal medium, occasion the appearances of different colours? I think the electric fluid is always the same; yet I find that weaker and stronger sparks differ in apparent colour: some white, blue, purple, red;—the strongest white; weak ones, red.”

Several objections here present themselves. Some of them arising from the hypothesis itself; and others from the comparison of light with sound.

In respect of the former, if universal space be filled with a subtile elastic fluid, (so as to exclude any vacuum) that fluid must always be at rest, and therefore, by the hypothesis, always invisible; and consequently there would always be universal darkness. Or if any part of the fluid could be put in motion, the whole of it must be in motion: for not one particle of it could move, without moving, in the direction of its motion, the adjoining one, and this the next; and so on, *ad infinitum*. In this case, the least motion, wherever it might commence, must produce universal motion; and consequently, universal light; between which and universal darkness, there could be no medium.

But if the meaning of the expression be, what it was probably intended to be, that universal space, instead of being filled, doth greatly abound, with an elastic fluid, then

would not every thing, which disturbed that fluid, cause a luminous appearance? Would not the inhabitants of the sea and air, in all their motions, bespangle both; and thereby exhibit the various colours according to the different degrees of vibration, which those motions might occasion in the elastic fluid? As to ourselves, would not a radiance attend us wherever we went? What occasion should we have of candle-light, when a quick vibration of the hand, or of machines made for that purpose, would dispel the night? Or rather, might we not suppose there would be no night at all? for the action of the sun (if the sun should be necessary) would be communicated to us, notwithstanding the interposition of the earth. And would not the effect of that action, even at noon, when most direct, be only to enlighten us, unattended with heat, so essentially necessary to enliven and invigorate the animal and vegetable world?—Would not the elastic fluid, instead of exhibiting a round luminous body, which we call the sun, be itself a continued universal blaze of light? And would not this, in the present constitution of things, obstruct vision, and totally alter the science of optics?

The objections, implied in the foregoing queries, seem deducible from the hypothesis. There are several, which appear to arise from the comparison of light with sound.

1st. As sound (or a vibrating, or undulating motion in the air, which I consider here as synonymous) is propagated from the sonorous body in all directions—and surrounds, and is propagated beyond or behind any obstacle in its way; so light, if it was a vibration, or undulation, of the elastic fluid, would surround, and be propagated behind an obstacle, like sound: but this does not agree with the fact. 2dly. As sound or the vibrating motion in the air, origina-

ing in a house, or any other enclosure, would, from a hole in one of the sides of it, be propagated externally, in circles, of which the hole would be the centre: so light, if it was a vibration, or occasioned by a vibration, of the elastic fluid, after passing through a hole, would be propagated in circles, of which the hole would be the centre. But this does not correspond to the fact: for light, in passing through any uniform medium, always passes in right lines.

Beside these, an objection similar to one of those, which have been advanced against the common hypothesis, and which may be seen in the proper place, may be alleged against this; for the constant vibration, with which the elastic fluid must be agitated, would communicate to small bodies, and even to large ones suspended in that fluid, a constant tremulous, vibratory motion. In such a case, it would be difficult to examine the texture and visible qualities of those small bodies, as one necessary mean of examination, a great deal of light, would increase the vibration; and thereby render the examination not only difficult, but impracticable. It is apprehended, however, that no such motion, or embarrassment, in the making of such examinations, has ever been observed.

What is mentioned about the electrical spark, that it is bright, and visible at a distance, and this without fuel—and that no part of the electrical fluid flies off, in such case, to distant places, but all goes directly, and is to be found in the place, to which it is destined, appears to favour the hypothesis; as the implied inference seems to be, that the visibility of the electric spark arises from the vibration it produces in the universal elastic fluid. But if the foregoing queries furnish sufficient

reason for doubting the existence of such a fluid, or for doubting such an effect from it, supposing its existence, will they not furnish equal reason for doubting the hypothesis?

The visibility of the electric spark may be accounted for, upon the principles of the received doctrine concerning light, without supposing any diminution of the pure electric fluid in the spark: no part of which, it is said, flies off in the case mentioned.

It seems not improbable, that the electric fluid is heterogeneous as well as light.

The heterogeneousness of light is inferred from its colours, which are said to vary proportionably, as the size of the particles doth vary: the variation becoming conspicuous by a prism, and by other means, which class the particles according to their respective magnitudes, or degrees of refrangibility and reflexivity.

Beside this, another reason may be suggested, from which the heterogeneousness of light may be deduced: namely, because it exhibits effects similar to some of those of electricity. For example, a globe or pane of glass warmed in the sun, or before a fire, will successively attract and repel small cork balls, down, and such like bodies insulated, and properly circumstanced; and will shew other signs of electricity communicated to the glass by the sun or fire.

So, in regard to electricity, its heterogeneousness may be collected from its producing effects resembling some of those of light or fire; which are here considered as equivalent terms.

Electricity and fire differ in many respects, and in some they agree; as hath been shewn in dr. Franklin's letters on electricity. So far as they agree in their effects, their nature may be presumed to be alike; or rather, from that agreement and

similitude of effects, I think it may be inferred, that they are mixed with, and generally do accompany each other: and that each produces its own effect at the time of their joint operation. The effects of electricity, similar to those of fire, being produced by the fire mixed with it; and the effects of fire, resembling those of electricity being produced by the electricity mixed with that: the compound taking its name from the predominant principle.

Thus, fire inflames bodies, and throws its particles or light at a distance. Hence the explosion of gunpowder, and the luminous appearance, occasioned by the electric spark: the fire mixed with it producing those effects.

Thus also, electricity attracts and repels certain small bodies alternately, under given circumstances. Hence, the alternate attraction and repulsion of glass, and some other things, heated by fire: the electricity mixed with the communicated fire producing those effects.

In this way, I would infer the heterogeneousness of light and electricity, and their mixture with each other; and in this way, account for the similitude and difference of their effects; and for the luminous appearance or visibility of the electric spark in particular, without diminishing the pure electric fluid contained in it: all of which, in the case referred to, is said to go directly, and is to be found in the place, to which it was destined.

On the same principles, the shining of diamonds in the dark, when rubbed, and thereby electrified, may be accounted for, without supposing they lose any part of their matter.

In regard to the different colours of the electric spark, which are more or less strong according to the strength of the spark, they correspond to the different colours of light or fire;

which are more or less vivid according to the density or intenseness of that element. This sameness of effect shews a sameness of cause, or that the light or fire mixed with the electric spark produces those colours whose strength or vividness being according to the bigness of the spark or to its quantity of electric fluid makes it probable, than in proportion to the quantity, there is more or less light or fire contained in the fluid.

Those different appearances seem to be a further instance or proof of the heterogeneousness of the electric fluid; and, taken in connexion with other appearances above-mentioned, shew the intermixture, and the consequent heterogeneousness, of the two elements.

The next thing to be considered, is the objection to the received doctrine concerning light. But this will be the subject of another memoir.



Observations on light, and the waste matter in the sun and fixed stars, occasioned by the constant efflux of light from them: with a conjecture proposed by way of query, and suggesting a mean, by which their several systems might be preserved from the disorder and final ruin, to which they seem liable by that waste matter, and by the law of gravitation. Communicated to the American academy of arts and sciences, by James Bowdoin, esq. president of said academy, and late governor of the state of Massachusetts.

HAVING in a preceding memoir laid before the academy the observations that occurred on the subject of dr. Franklin's hypothesis relative to light, I shall now consider his objections to the received doctrine concerning it.

The objections will appear by the

following paragraph taken from one of his letters on philosophical subjects.

“ I must own, says the doctor*, I am much in the dark about light. I am not satisfied with the doctrine, that supposes particles of matter called light, continually driven off from the sun’s surface, with a swiftness so prodigious! Must not the smallest particle conceivable, have, with such a motion, a force exceeding that of a twenty-four pounder, discharged from a cannon? Must not the sun diminish exceedingly by such a waste of matter, and the planets, instead of drawing nearer to him, as some have feared, recede to greater distances through the lessened attraction? Yet these particles, with this amazing motion, will not drive before them, or remove, the least and lightest dust they meet with: and the sun, for aught we know, continues of his ancient dimensions; and his attendants move in their ancient orbits.”

The doctor’s dissatisfaction with the received doctrine, is founded on two objections implied in his queries, and which may be expressed in the following propositions.

1st. That supposing the doctrine true, the smallest particle of light must be driven to us with prodigious force, a force exceeding that of a twenty-four pounder, discharged from a cannon. But this is contrary to fact.

2dly. That the sun must be exceedingly diminished by such a waste of matter; and the planets, in consequence of it, must recede to greater distances from him. But, for aught we know, both the sun and the

NOTE.

* See letters and papers on philosophical subjects, page 264. edit. 1769.

planets, continue in their ancient state.

From these propositions it is implicitly inferred, that the doctrine is not well founded.

Among the observations on the second proposition, an hypothesis will be proposed, by way of query, suggesting a mean, whereby the material system, collectively taken, might be preserved from the disorder and ruin, to which they seem liable from causes hinted at in that proposition.

In regard to the objection contained in the first proposition, it adopts the idea, that light, like any other body in motion, will strike with a force proportioned to the degree of its motion: which degree of motion, or the celerity, multiplied by the quantity of matter in the body, will, in the result, express its force or momentum.

If, then, we can suppose the quantity of matter in a particle of light to be, not indeed absolutely, but comparatively, 0, its momentum will also be comparatively 0; and it can have, in that case, no visible effect on the smallest particle of dust, to remove it.

Let us now consider what reason there is for such a supposition. In order to that, I beg leave to introduce here, a paragraph, from one of my letters to dr. Franklin, printed with his letters and papers on philosophical subjects. It runs thus*, “ The flame of a candle, it is said, may be seen four miles round. The light, diffused through this circle of eight miles diameter, was contained, before it left the candle, within a circle of half an inch diameter. If the density of light, in these circumstances, be as those circles to each other, that is, as the squares of their

NOTE.

* Letters, &c. p. 275.

diameters (or, which is equivalent, if the density decreases as the square of the distance or semi-diameter increases, the candle-light, when come to the eye, will be 1,027,709,337,600 times rarer than when it first quitted the half-inch circle. Now the aperture of the eye, through which the light passes, does not exceed one tenth of an inch diameter, and the portion of the less circle, which corresponds to this small portion of the greater circle, must be proportionably, that is, 1,027,709,337,600 times less than one-tenth of an inch : and yet this infinitely small point (if you will allow the expression) affords light enough to make it visible : or rather affords light sufficient to affect the sight at that distance."

If the calculation, referred to in that paragraph, be just—and we should suppose a single particle of light, though incomparably smaller, to be in bigness equal to that point—I would ask whether the quantity of matter in such a particle would not be small in a greater degree than its velocity, equal to that of the sun's light, would be great ? If so, a particle of light in motion, agreeably to the foregoing supposition, may be here estimated 0, and its momentum not sufficient to remove the lightest dust; much less to do as much execution as a twenty-four pounder, discharged from a cannon.

It is impossible to calculate the momentum, where the requisite data cannot be had : but supposing the candle-flame equal in bulk to a sphere of half an inch diameter, and to weigh as much as an equal bulk of air, viz. about one thirtieth part of a grain ; though in fact its gravity is incomputably less than that of air : then the square aforesaid will express the proportion, in which the density of the candle-light is diminished at the

verge of the greater circle : and the same proportion of one thirtieth of a grain will express the weight of that light at the verge, viz. one 30,831,280,128,000th part of a grain ; which we will consider as the weight of a single particle of the sun's light. If the velocity of light be at the rate of 80,000,000 miles in six minutes, then its velocity will be 222,222 miles, equal to 14,079,985,920 inches, in a second. This number of inches, divided by 30,831,280,128,000. the supposed particles in a grain, will shew the degree of motion required in a body weighing one grain, to give it a momentum, equal to that of a particle of light, upon the hypothesis assumed : which motion will be 456 millionth parts of an inch in a second, equal to one inch in 2190 seconds, or thirty six minutes and an half ; and is much slower than the hour-hand of a common clock ; which, with its greater degree of motion, and much greater quantity of matter, does not give to the smallest bodies, placed in its way, any visible motion.

Precision in this calculation is not aimed at, and the nature of the subject does not admit of it : but it is apprehended it will appear sufficiently evident from it, that light, even if its velocity were much greater than it is, and its gravity equal to that of air, to which, with great disadvantage to the argument, it has been, in that respect, compared, cannot drive before it the lightest dust, or, indeed, give it any sensible motion at all.

To the same purpose it may be further observed, that light reflected to the eye through a microscope and prism, would, it is apprehended, exhibit the same variety of colours, as light coming directly from the sun. In which case, the ray so viewed, (like the candle-ray, which has been

considered as a single particle only) must be composed of a multitude of particles; and be a proof, that the particles of light are inconceivably smaller than the calculation supposes. This degree of smallness, however, represents them to be of great magnitude, compared with their real size: for, when we consider, that the sun's light is diffused through the whole solar system, and much beyond it—and that a part of it, in that attenuated state, is reflected to us from the planets, in which reflection it undergoes, by its divergence, a further, and an extreme, attenuation—and especially, when we consider the immense sphere, throughout which the light of the fixed stars is visible, particularly those of them, whose distance is so vast, that, at opposite points of the earth's orbit, they have no sensible parallax—the divisibility of light, and the proportionable tenuity of its particles, confound the imagination; and render human calculation inadequate to express the precise degree of them, or the inconsiderableness of the momentum of those particles.

This inadequateness is particularly applicable to the foregoing calculation: which was purposely made on the disadvantageous principles assumed in it, to shew, that even on such principles, the momentum of light could produce no visible motion in the smallest bodies, that fall under our notice. But had the calculation been founded on the state of the sun's light, reflected from one of the planets, for instance, the *Georgium Sidus*, lately discovered by Mr. Herschell, the result would have been widely different; and we should, in that case, have had a juster idea of the momentum. The light reflected to the earth from that planet, whose mean distance from the sun is said to be 2,000,000,000 miles, is so extremely attenuated, that the momen-

tum of a particle of it, transferred to a body, weighing a millionth part of a grain, would communicate to it so small a degree of motion, that it would require millions of ages for that body to move the diminutive part of an inch mentioned in that calculation.

If these observations be just, it is apprehended they shew, with some degree of evidence, that a particle of light, notwithstanding its prodigious velocity, cannot, by its impulse, remove other bodies, or displace even the finest microscopic dust; and that the doctrine objected to, may be true, notwithstanding the first of the two objections, which have been made to it.

The second proposition, containing the other objection, is, that in case there are particles of matter, called light, continually driven off from the sun's surface, the sun must be exceedingly diminished by such a waste of matter; and the planets, in consequence of it, must recede to greater distances from him, through the lessened attraction.

Here I beg leave to observe, that if the material system, in its present form, was not intended by its Creator to be perpetual, then the waste of the sun's matter, and the consequent disorder in the system, arising from the altered state of its gravitation, will only be a proof of that intention: and not operate against the truth of the doctrine.

That system, like every other, derived from the same original, doubtless has within itself the means of continuing in its present form, until the great and wise purposes of its author shall be brought into effect, and completely answered.

With respect to the solar system, so far as its continuance depends on the sun, it seems calculated, notwithstanding the supposed waste of the sun's matter, to last for many

ages; for the sun, by reason of its prodigious bulk, and the divisibility of its matter, must, from its own internal sources, furnish light to the system, through a long tract of time, without being sensibly diminished. If those eccentric bodies, called comets, which have been thought intended to recruit the sun's waste of matter, do in fact answer that purpose, provision is then made for the preservation of the system, at least until those bodies shall have all successively fallen into the sun, and been expended. When that shall happen, if there be provided no further means of recruit, the system will begin to decay, and finally be reduced to a chaotic state: from which, like our earth, it may be restored in some new form, to answer the further purposes of the Creator. I mention our earth, as in the Mosaic account of it, its original is described in such a manner, as to give us the idea of its having been an old planet, by some means or other reduced to a chaos; from which it was renovated, and made suitable for the purposes, to which it has been applied.

There is nothing unreasonable, or improbable, in that idea: and if the earth was so renovated, it may be inferred from analogy, that in case the present system should go to decay, a new one, and perhaps a superior one, would arise from its ruins.

These observations are founded on the idea of the waste of the sun's matter, and its final dissolution, with that of the system depending upon it: whether gradually occasioned by that waste of matter, or more rapidly brought on by the general law of gravitation. In this view of things, the objection does not militate with the doctrine.

But perhaps it may be thought more philosophical, and that it would better comport with our ideas of the

wisdom of the Creator, to suppose, that when he created the system, he intended it should be a permanent one; and at the same time furnished it with the means of its own preservation. In which case, may it not be further supposed, particularly with regard to the efflux of light from the sun, by which its matter is conceived to be wasted, that he provided means whereby the effluent particles, after answering the purpose of their efflux, should be returned to the sun, to answer again, in a constant succession, the same purpose?

I do not know, whether the hypothesis, suggested in the following queries, and relative to that subject, be admissible, or not. It is however offered for consideration.

It was primarily and specially intended to suggest a mean for preventing the ruin, to which the material system seems liable, from the general principle of gravitation: but the same mean may possibly be applied to restore to the sun, in a regular succession, its effluent light; and thereby obviate the evil effects that might otherwise follow from the efflux.

Is it not conceivable, that round the solar system, and the several systems, which compose the visible heavens, there might have been formed a hollow sphere, or orb, made of matter, *sui generis*, or of matter like that of the planets, and surrounding the whole; having its inner or concave surface at a proper distance therefrom; beyond which surface light could not pass, and between which, and the particles of light, there should be a mutual repulsion? And might not the sun, or source of light, of each system, have been so placed, in respect of each other, and the concave surface of the surrounding orb, that there should be, by direct and repeatedly indirect reflexions, an interchange of rays between them, in such a manner, as that to

each there should be restored the quantity it had emitted; and thereby the waste of its matter be prevented: and this at the same time it dispensed its light to its particular system?

This use of such an orb is here meant to be considered as a secondary or incidental one; to which it might be applied: but the principal or primary use of it, as a counterbalance to the gravitating principle of the systems contained within it, will be seen in its proper place.

There is a remarkable phenomenon in the solar system, to which the ideal one, just mentioned, bears some resemblance, and by which it was suggested: I mean the ring or arch, which surrounds the planet Saturn. We are told by astronomers that its width, and also its distance from Saturn, is about 25,000 miles—forming around that planet a beautiful arch, which may be designed, among other purposes, to increase its light and heat by reflecting upon it, like a concave mirror, the sun's rays: of which, by reason of its great distance from the sun, it would not otherwise have had a sufficient quantity.

If Saturn were a luminous body, per se, and the arch, (made of suitable matter, and properly constructed, for the purpose) entirely environed it, the whole quantity of light emitted from it, would be reflected back; and no waste of its matter arise from that emission. The same kind of hollow sphere or orb, surrounding, for instance, the solar system, would answer the same purpose. Its sun being in the centre of the orb, would have all its light reverberated back to it: except the comparatively small quantity intercepted by the planets: a great part of which quantity would, by direct, and indirect reflexions, be returned to the sun; and a quantity equal to

the remainder, by means of volcanoes, and other internal fires in the planets, might be thrown off from them, and conveyed to the sun; whereby the equilibrium of the whole might be preserved.

Such an orb for a single system appears simple and plain; and such an one for the whole choir of systems, though seemingly more complicated, might yet appear equally suitable for the purpose, when its structure, and the laws and principles which governed it, and also the situation of the several systems relative to it, and to each other, should become known.

Its stupendous extension would be no objection to the supposition of its reality: for if the convenience and pleasure of the inhabitants of Saturn were a sufficient reason for furnishing that planet with its massy ring, the preservation of such a choir of systems, with the astonishing multitudes of their inhabitants, would justify and sufficiently support the supposition of such an orb: especially, when it is considered, that besides answering the grand purpose of preserving those systems, it might, perhaps, like Saturn's ring, be provided on both sides of it, with ample means of making it a suitable place for habitation—the habitation of myriads of millions of animate beings, equal or superior to those, which people our planetary system.

Beyond that orb, at proper distances, it is conceivable, there might be other concentric orbs, equally suitable for habitation, and alike inhabited: including within them innumerable systems of planets, resembling the solar system, and like that animated, and adorning the infinite expanse.

To this hypothesis, objections may be made, and such as might prove it to be, like many a one which has

preceded it, a mere philosophical reverie. But before it be ranked in that class, I would ask, whether, if there be no such orb, nor any thing to answer a like purpose, the law of gravitation, that universal law, on which the philosophy of the immortal Newton is founded—by which, with such admirable sagacity, he has explained the phenomena of material nature—and on which he makes its preservation depend, will not finally bring on its dissolution? Or rather, whether the operation of that law would not long ago have brought it on?

The sun of our planetary system, and the suns (called fixed stars) of other systems, and therefore the systems themselves, do probably, according to astronomical observations, possess the same relative place; or are, in respect of each other, fixed. But how are the exterior systems (supposing the whole not boundless) prevented from approaching towards the common centre of gravity: from which, if they have no revolution round it, (which the like observations make probable) they cannot be kept by a projectile or centrifugal force? Must they not constantly by that law be drawn, with an accelerating motion, towards that centre; and finally, with the whole choir of systems, directed by that law, arrive at it with successive tremendous crashes, until the destruction of the whole would be completed? and could any thing, but the interposition of the power which created them, prevent it*?

NOTE.

* Mr. Whiston observes, “It is by no means impossible, that all the bodies in the universe should approach to one another, and at last unite in the common centre of gravity of the entire system: nay from the uni-

If such a catastrophe would be the effect of that law, would it not demonstrate the wisdom and foresight of the Creator, to suppose, he provided the means of counteracting that effect, at the same time he ordained the law? And among the possible means of doing it, is it not conceivable, that a hollow sphere, or orb, analogous to that above described, might be one?

It has been suggested in what way such an orb might prevent the gradual waste and decay of the material system. Let us now see, whether it might not be applied to prevent the swifter and more dreadful catastrophe, to which the law of gravitation, in certain circumstances, seems capable of subjecting that system.

The described orb, like every other body, would possess the gravitating principle, in proportion to its quantity of matter: which, in different parts of the orb, might be more or less dense, as the effect, intended to be produced, might require. Where a strong attractive power might be necessary, the density would be greater; and so, *vice versa*: and to assist or co-operate with it, a magnetic power might be superadded.

Thus constituted, and furnished with those, and other needful qualities, and surrounding the whole visible choir of systems, might not the orb, by the principle of gravitation, either alone or assisted, keep those systems, next to it, from being drawn towards the centre of gravity by their own, and the

NOTE

versality of the law of gravitation, and the finiteness of the world, in length of time, except a miraculous power interpose and prevent it, it must really happen.” Discourse, introductory to his theory, p. 38.

mutual action of the interior systems? And might not those several systems be so placed, and the densities of the bodies respectively belonging to them, with the densities of the surrounding orb, and consequently their mutual gravitating power, be so regulated, and adjusted, as to keep them all at the distance assigned them; and forever prevent their approximating, either to the centre of the general system, or to its surrounding orb: all of them together thus constituting an undecaying permanent whole?

It has been observed by philosophers, “that a body placed any where, within a hollow sphere, which is homogeneous, and every where of the same thickness, will have no gravity, wheresoever it be placed: the opposite gravities always precisely destroying each other*.” But that observation cannot be applied to the hollow sphere or orb, above described: for by the description, it is not homogeneous. Nor need it be of equal thickness: which, however, is a circumstance of no consideration, if equal thickness, with different degrees of density in different parts, would answer the purpose.

The phenomena of nature, upon the supposition of such an orb, would probably be the same, *cæteris paribus*, as now take place. Whether that supposition be supported by phenomena, and what other foundation there is for it, will be the subject of a future memoir.

NOTE.

* Chambers’s Cyclopædia, under the word, gravity.

Observations tending to prove, by phenomena and scripture, the existence of an orb, which surrounds the whole visible material system; and which may be necessary to preserve it from the ruin, to which, without such a counterbalance, it seems liable by that universal principle in matter, gravitation. Communicated to the American academy of arts and sciences, by James Bowdoin, esq. president of the said academy, and late governor of the state of Massachusetts.

AT the conclusion of a memoir, entitled, “Observations on light,” &c. which I have had the honour to lay before the academy, it was intimated, that there are phenomena in nature, and other evidence, tending to prove the existence of an orb, that surrounds the whole visible material system.

The evidence is—phenomena and scripture.

The phenomena are,—the luminous girdle in the blue expanse, called the Milky Way—other luminous appearances in it—and the expanse itself.

In regard to the luminous girdle, or Milky Way.—This phenomenon has been supposed to result from the combined lustre of infinite multitudes of stars, too distant to be distinctly visible. But although it be observed through telescopes, that there is a great number of stars in the Milky Way, on which circumstance the supposition is founded, they appear as stars set in it, distinguishable from it, and not contributing to form the phenomenon.

The supposition not only disagrees with the appearance, but is inconsistent with every philosophical idea concerning those stars. They are represented to be suns: each having its system of planets revolving round

it; and consequently requiring a space proportioned to their number, and the extent of their systems: which space, for such multitudes of them as the supposition implies, must be beyond conception immense: and through which they must therefore be dispersed at such distances, that comparatively few of them could be visible by us; and that the whole together would not blend their light to cause that phenomenon.

On the contrary, the phenomenon strikes us, as it may be supposed such a luminous girdle would strike, if its light were reflected from the concave surface of a far-distant orb: to which, on the hypothesis assumed, it had been propelled from the numerous systems which the orb enfolds.

The same idea is suggested by the different degrees of its light, from a small light to a faint one, scarcely discernible; by the frequent interruptions of it; and by the large chasm, which, for a considerable space makes the girdle appear double and very irregular.

These appearances may be occasioned by the situation of the earth, in respect to those parts of the orb, from which certain cones of light (presently to be explained) are reflected; and by that particular construction, and configuration of those parts; by means of which those cones are broken and irregularly reflected to the earth: whose different situations in its orbit, by reason of its great distance from the orb, would occasion no sensible difference in the appearance.

With respect to the other luminous appearances in the concave expanse, I beg leave here to introduce several observations upon that subject, from two authors, who have distinguished themselves in the astronomical branch of science.

One of them, dr. Smith, in his

system of optics, * observes that Hugenius, in the year 1656, looking by chance through a large telescope, at three small stars very close to one another, in the middle of Orion's sword, saw several more as usual. But the three little stars very near one another, (marked θ by Bayer) together with four more, shone out as it were through a whitish cloud much brighter than the ambient sky which being very black, caused that lucid part to appear like an aperture, which gave a prospect into a brighter region. He viewed it many times; and found it continued in the very same place, and of the same shape as the figure here represents:



and called it, *portentum, cui certe simile aliud nusquam apud reliquas fixa potuit animadvertere.*"

He also observes, that "in the philosophical transactions, † there is an account of a later discovery of five more such lucid spots, though less considerable than this of Hugenius; the middle of which, we are there told, is at present in \square .

NOTES.

* P. 447—8

† No. 347, Jones's Abr. vol. iv p. 224.

5° 00' with south latitude 28° 45' and that it sends forth a radiant beam to the south-east, as another in the girdle of Andromeda seems to go into the north-east. It is also here remarked, that though these spots are in appearance but small, and most of them but a few minutes diameter; yet, since they are among the fixed stars, as having no annual parallax, they cannot fail to occupy spaces immensely great; and, perhaps, not less than our whole solar system: in all which spaces, it would seem, that there is a perpetual uninterrupted day."

The other author, Mr. Ferguson, speaking of the Milky-Way, says*, "There is a remarkable tract round the heavens, called the Milky-Way, from its peculiar whiteness, which was formerly thought to be owing to a vast number of very small stars therein: but the telescope shews it to be quite otherwise; and therefore its whiteness must be owing to some other cause. This tract appears single in some parts, in others double."

"There are several little whitish spots in the heavens, which appear magnified, and more luminous, when seen through telescopes; yet without any stars in them." Five of which spots he particularly mentions.

He next observes, that "cloudy stars are so called from their misty appearance. They look like dim stars to the naked eye: but through a telescope, they appear broad illuminated parts of the sky; in some of which is one star, in others more. But the most remarkable of all the cloudy stars, is that in the middle of Orion's sword, where seven stars (of which three are very close together) seem to shine through a

cloud very lucid near the middle, but faint and ill-defined about the edges. It looks like a gap in the sky, through which one may see, as it were, part of a much brighter region."

These quotations, without making any comment upon them, shew, that the Milky-Way is not owing to the stars contained in it; that the telescope shews it to be quite otherwise; and that it must be owing to some other cause: that, in respect to the lucid spots, in some of them there are no stars; in others but few; and that one of them exhibits a remarkable appearance of an aperture, or gap, that gave a prospect into a brighter region: that the spaces they occupy, though small in appearance, are, perhaps, not less than our whole solar system; and that in them it should seem there is perpetual uninterrupted day.

From these phenomena it seems not improbable, that the Milky-Way, and those lucid spots, are parts of a concave body or orb, of the same nature with some of the other heavenly bodies; and, whose light transmitted to us, exhibits those phenomena, according to the laws and circumstances, which regulate it.

There is another, and still more remarkable phenomenon, that suggests the idea of such an orb; I mean the blue concave expanse, which surrounds, and appears to limit visible nature; and which is the last to be considered.

It is thus explained by Sir Isaac Newton; who observes, that all the "vapours, when they begin to condense and coalesce into natural particles, become first of such a bigness as to reflect the azure rays, ere they can constitute clouds of any other colour. This, therefore, being the first colour they begin to reflect, must be that of the finest

NOTE.

* Astronomy, p. 339—40. Edit. 4th.

and most transparent skies : in which the vapours are not arrived to a grossness sufficient to reflect other colours."

By this explanation, it appears, that the cause of this phenomenon exists within the earth's atmosphere. If it really doth exist within it, the phenomenon, from the assigned cause of it, seems to be nothing more than a blue transparent cloud, more or less extensive, in proportion as the atmosphere may happen to be less or more charged with other clouds.

If this were the cause, would not the heavenly bodies, in a clear sky, partake of the colour of that cloud, and appear blue, or be tinged with it, by means of their light passing through the blue cloud? And would not this appearance indicate, that the blue rays of their light were transmitted, and the other coloured rays, for the most part, reflected, from the atmosphere? Would not that transmission of the blue rays occasion all bodies around us to appear blue, so long as the atmosphere, continuing clear, should exhibit the blue cloud*? And would not the colours of those bodies vary, as other coloured clouds should succeed and predominate.

Would not this reflection of the other coloured rays occasion not only a decrease of light, but, with respect to the sun, a great diminution of its heat? If the several different coloured rays do each, in respect to heat, produce an equal effect; and all but the blue rays are reflected, should we not in a clear day, be deprived of six-sevenths, or a proportionable part, of the sun's heat, which the seven sorts of rays, had they

NOTE.

* Chambers's Cyclopædia, under the word blueness.

been all transmitted, would have afforded?

Such appearances and effects might have been expected, if the assigned cause produced the phenomenon for the sun's light and other light and also bodies in general, whatever be their colour, being viewed thro' a medium of any original colour will appear of that colour, or strongly tinged with it. But it is apprehended, that no such appearance and effects have ever been observed and, therefore, that there is reason to doubt the reality of the cause assigned: the insufficiency of which may further appear in the course of these observations.

But how is the existence of the orb deduced from the phenomenon—in the same manner as the existence of the other heavenly bodies and the existence of the bodies around us are deduced: namely, from the uniformity and permanency of their visible qualities, or phenomena.

In regard to bodies around us whenever by sight we have been impressed with certain ideas of colour, form, and magnitude, corresponding to bodies near us, and at an approachable distance, we have found by constant and uniform experience derived also from, and confirmed by every other sense and means of information, that such bodies do really exist: and having thus from experience gained the knowledge, that certain phenomena do infallibly indicate the existence of those bodies the phenomena themselves do then alone become the undisputed evidence of that existence.

Nature is simple and uniform in its operations. From the same cause follow like effects; and these indicate the same cause. Bodies of every kind, through the medium of light, produce their respective phenomena, and these demonstrate the reality of those bodies.

From these principles, we infer the reality of those terrestrial bodies, which, by reason of their situation and distance, can only be the objects of sight: and from the same principles we also infer the reality of the heavenly bodies, the planets and fixed stars. If this last inference be just, is it not equally just to infer from the same principles, the reality of the blue circumambient expanse? that is, that it is a real concave body, encompassing all visible nature: which is the exact description of the concave surface of the orb above-mentioned.

There is one appearance of the blue expanse, which may be thought to militate with the foregoing account of it.

In a clear day, it appears of a brighter blue than in the night, occasioned by the sun's light, reflected to us by the earth's atmosphere. From which circumstance, it might be supposed, that the cause of the phenomenon doth exist within the atmosphere, and is the atmosphere itself, or its vapour. It is apprehended, however, that this would be a mistaken supposition; and that the appearance may be explained on principles, which will not only invalidate the supposition, but further shew the insufficiency of the cause, to which the phenomenon has been ascribed.

For that purpose it may be observed, that the atmosphere being invisible, must be without colour; and has, perhaps for that reason, no greater disposition to transmit or reflect to us the blue rays of light, whether of the sun or stars, than those of the other colours: and, therefore, if the phenomenon be produced by means of the blue rays of those luminaries (which I shall attempt to explain) the atmosphere cannot be the cause of that production.

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With respect to the vapours in the atmosphere, which, in a particular state, are said to occasion the phenomenon, they being of different degrees of grossness or density, must arrange themselves according to that density, or their specific gravity. If then any of the ranges consisted of vapour, in a proper state to transmit or reflect to the eye the blue rays only, the effect of it would be destroyed, or changed, by the grosser vapour in the lower range. Or if it should so happen (which seems very improbable) that the whole body of vapour should consist of particles of the due size, and in the proper state to reflect the blue rays, it could not long continue in that state, by reason of the changeable nature of the vapour, and the numerous causes, that are constantly operating to produce a change in it. But the phenomenon is uniform and permanent; and therefore must be the effect of an uniform and permanent cause.

If these observations have any foundation, neither the atmosphere nor its vapour, assisted by, or assisting, the direct light of the sun and stars, can be the cause of the phenomenon.

The atmosphere, however, or its finer and transparent vapour, contributes to the brighter hue of the phenomenon by day: which may be thus explained:

The sun's light in its mixed state, reflected by the atmosphere, or by the transparent vapour floating in it, enters the eye at the same time with the blue light of the expanse; and both together delineate on the retina an image, formed by their united rays, each producing its effect. The light from the expanse exhibiting the blue image; the light from the sun illuminating or brightening the image; and both together impressing the idea of that phenomenon, as it is displayed in a clear day.

C

If it should be asked, from whence the concave expanse derives its light, the answer is—from the numberless planetary or solar systems, which it includes: and particularly from those in the neighbourhood of it, which directly answer the purpose of enlightening and, in other respects, accommodating its inhabitants.

This light, transmitted to the expanse through its atmosphere, is reflected back directly and indirectly to the systems from which it issued, to be again, in a due succession, re-mitted to, and reflected from, the expanse. By such a reciprocation, and mutual interchange of light with each other, and among themselves, the several parts may be supplied with the quantity they had respectively emitted; and the equilibrium of the whole maintained: whereby the evils, that might otherwise ensue from the waste, or undue distribution of its matter, and the consequent alteration of its gravitation, might be prevented.

To different systems, according to their situations, the expanse may exhibit very different phenomena. Although to our system, or to us on this planet, it exhibits the blue concave of an all-surrounding orb; which, in the milky way, and in some other parts of it, shines with a brighter light, it may to other systems appear of other colours; and exhibit to some of them in succession, according to their situations, the several primitive colours, in the order, in which the rays of those colours are separated and classed.

Of one of these exhibitions, that of the blue colour, we have ocular demonstration. But why should the expanse appear to us blue, rather than green, or any other primitive colour? If that appearance can be explained by the refrangibility of light, or by the separation of it into its several colours, as perhaps it can,

the other appearances of the expanse to other systems, naturally, if not necessarily, follow.

Experiments prove, that light is compounded of differently-coloured rays; and that after it has past through different mediums, properly disposed, the rays are refracted, or separated and classed, according to their different refrangibility; and shew those colours in the order just mentioned: that the three most refrangible of them, the blue, the indigo, and the violet, which possess one half of the space spread over by the whole, are so nearly allied in colour, that the last when considerably spread, are scarcely to be distinguished from the neighbouring blue: for which reason, those three classes appear as one, at a great distance from the refracting medium: and the blue, thus circumstanced, and uniting those classes, may therefore be said to possess a space equal to the space occupied by all the rest. That from any segment of a hollow sphere, such, for instance, as a concave mirror, whose arc does not exceed fifteen or eighteen * degrees; the cylinder of rays falling upon it, parallel to its axis, will, if there be no refraction, be reflected to a focus round that axis: the focus being nearly equidistant from the pole of the segment, and the centre of its sphere: and that those rays, if previously refracted, and classed into their several colours, will, in their divergence from the focal point, shew those colours in a reversed order: the refraction, however, occasioning an alteration in the position of the focus, and the diverging conc.

To apply some of these observations, it may be supposed that the

NOTE.

* Gravesande's Natural Philosophy, Book III. ch. xv. prop. 813.

interior side of the expanse has, in general, an uniform surface, which may be conceived as composed of a multitude of segments, each of them not exceeding a given arch: that it is furnished with an atmosphere, possessing, in some peculiar mode, the power of refracting light, of distributing its rays into their respective classes, and transmitting them to the expanse: which also may be conceived as assisting, by its reflecting power, in their classification: that the transmitted rays would, in their classed state, be reflected from it in all directions; and that such of them (by far the greatest † part of the whole) as should come to the atmo-

NOTE.

† That these parallel rays (parallel, I mean, to any and every conceivable diameter-line of the expanse) must constitute the greatest quantity or proportion of the reflected light, will be manifest from these considerations: that they come to every segment or part of the expanse from the opposite part of it, and from the systems situated between such opposite parts: that the distance of any two opposite parts from each other, equal to the diameter of the expanse, is the greatest that can take place within it: that there must, therefore, be, in the space between them, a greater number of systems supplying the expanse with light, than there can be in any extra-central direction; and that this may be affirmed of every two opposite parts or segments in the whole surface of the expanse. The effect of the atmosphere, in regard to the refraction, is not here noticed. These rays, like the sun's rays at the earth, are considered as parallel, by reason of the great distance of the radiant bodies, and the consequent extreme minuteness of the angle of divergence at such a distance.

phere in parallel lines or in cylinders, whose axes were diameter-lines of the expanse, and whose bases were equal to those segments, would pass through the atmosphere to the corresponding segments of the expanse, and be reflected from them; and afterwards, in the same classed state, unite in a focus, from which they would diverge, and exhibit their several colours.

To give some idea, though an imperfect one, of that focus, the reflexion and convergence may be conceived as made (somewhat in the manner above represented) from the segments composing the whole surface of the expanse: that each segment would reflect a cone of rays, terminating in a focus; and that the united foci of those cones, which must be considered as coming from all quarters of the expanse, would constitute its general focus.

In some such disposition, and state of things, as here represented, it is conceivable, that the system-light, transmitted to the expanse through its atmosphere, might be reflected from those segments; and for the most part converge in cones towards a general focus; where, by means of the refraction and separation, it had undergone in that transmission and reflexion, it would be, in each cone, arranged or classed, according to the different refrangibility and reflexibility of its rays. After the rays had past the boundary of their focus, they would intersect each other, and form new and reversed cones, or conic figures, in which each sort of the coloured rays, as, before the intersection, would generally be together; and in that associated state, continually diverge, in proportion to their distance from the line of intersection.

But perhaps the whole of this effect, the classification of the rays, may be caused by the reflecting

power of the expanse: which, in that case, would receive the rays in the same mixed state, as the direct solar light comes to the earth: with respect to which, we know, that it frequently undergoes a classification by reflexion, as well as by refraction.

In either case, as the three most refrangible and reflexible classes, at a proper distance from the focus, are not to be distinguished from each other, but all appear blue; and as the blue, at that distance and beyond it, doth therefore possess so large a portion of the interior space of the expanse, it is conceivable, that many systems may be so placed, as to be on all sides in the direction of the rays of that colour; and to which the whole expanse would, for that reason, appear blue.

With respect to the earth, it is probably so situated, as to be in all parts of its orbit, principally within the limits of such classes, as are composed of the blue rays; and partly within the verge of classes, whose rays, by reason of their imperfect separation, being in a mixed state, exhibit a brighter light. The predominant colour, therefore, of the expanse, as it respects the earth, is blue; with interpersions of a brighter light, such as the Milky Way, and other lucid parts of the expanse: whose irregular appearance, in the Milky Way, may be owing (as hath been already suggested,) to the particular construction and configuration of its parts: the brightness of which seems to intimate some peculiarity in their constitution, and in the circumstances attending them—nature thus exhibiting, on a broad scale, phenomena, which our little experiments can exhibit only in miniature; and of which those experiments sometimes lead to a happy explanation.

Whether the foregoing be such an

explanation, or wholly chimerical, in reference to the colour of the expanse, does not affect the expanse itself: whose existence, considered as an all-surrounding orb, may be real, although the assigned cause of its colour be demonstrably without foundation.

From the several phenomena above-mentioned, unless the evidence, supposed to arise from them, be futile, or inadmissible, there is reason to conclude, that an all-surrounding orb doth really exist; and that the blue expanse is that orb.

It is an observation of sir Isaac Newton, “that the main business of natural philosophy, is to argue from phenomena, without feigning hypotheses; and to deduce causes from effects, till we come to the very first cause, which certainly is not mechanical; and not only to unfold the mechanism of the world, but chiefly (among others that are mentioned) to resolve these, and such like questions, viz. Whence is it, that the sun and planets gravitate towards one another, without dense matter between them? and what hinders the fixed stars from falling upon one another?”*

Agreeably to the foregoing observation, the author of this memoir having adduced certain phenomena—(he hopes not impertinently)—has endeavoured, not only to argue from them, and to deduce the cause from the effects, but to resolve that great question, concerning the fixed stars and the heavenly bodies in general, namely, What hinders them from falling upon one another, and thereby involving the whole in ruin?—Whether his endeavours have been successfully applied, those who are conversant in subjects of this nature, are best qualified to judge.

NOTE.

* Optics, p. 344. 4th edit. 8vo.

In regard to the subject in hand, it seems to be a happy coincidence between phenomena and scripture; and, therefore, in further evidence of such an orb, and in evidence of several other orbs similar, and concentric to it, we may recur to scripture; several passages of which appear applicable to that purpose.

It seldom happens, that natural philosophy is made to borrow assistance from thence: but though scripture may not be intended to instruct in the philosophy of material nature, it may nevertheless give, and intended to give, some hints of constitution, or general system.

As the passages referred to, do not need any laboured comments, a very few observations will suffice to explain and apply them.

A remarkable one, and which may serve, in some measure, to elucidate the rest, is this passage, "It is God that buildeth his stories in the heavens."* In the English translation, which agrees with the French, with the Latin of Castellio, and of Trellius and Junius, the marginal reading, referring to stories, is spheres and ascensions. The former explanatory of stories: the latter, another word for the Hebrew; and which answers to the Greek of the Septuagint. All which, both separately and together, give the idea of succession of concentric spheres, ascending one above another, like the stories of a magnificent building: and, agreeably to that idea, though on very different principles, perhaps on account of the Ptolemean system, the text has been explained.†

NOTES.

* Amos, ch. ix. 6.

† Qui ædificat in cælo (in firmamentis cælis) ascensiones suas—lunas suas—gradus suos: i. e. or-

This construction, which appears to be a natural one, gives a meaning to the text—a meaning illustrative of the omnipotence of the architect: and, at the same time that it elucidates some other texts relative to the subject, it is perfectly descriptive of the concentric spheres, or orbs, above mentioned.

The same idea is intimated in the short account, given of the creation, by Moses, who seems to refer to two firmaments.—The first he mentions, is limited to the earth and its atmosphere; and the other is that in which the fixed stars do appear.

It is this latter, that is here to be considered: concerning which, "God said, let there be lights in the firmament of heaven;" and concerning which, it is declared, that "God set those lights in the firmament."‡

NOTES.

bes cœlestes, qui sunt velut gradus, unus supra alterum.

Poli synopsis in loc.

‡ Gen. ch. i. v. 14. 17.

Mr. Whiston, whose explanation of the Mosaic account of the creation, is natural, and in general seems to be just, make no distinction of firmaments; which, however, he might have made, without injuring his theory; and which his own rules of interpretation would have justified.

The upper firmament, or the blue expanse, in which the heavenly bodies were "set," he might have included, together with them, in the work of the fourth day, or year, as it was rendered visible at the same time, by means of the earth's atmosphere, in that year, becoming transparent: which atmosphere, according to his theory, is the [other] firmament, or expanse. He supposes, the earth had no rotation about

The radix of the Hebrew word, translated firmament, is applied to God's spreading out the sky, to the firmament, or spacious extension, which is spread abroad between the earth and the clouds: as also to that other firmament, or spacious extension, which is above the clouds, where the heavenly bodies are placed.*

The original word † means not only firmament, but expanse, or spacious extension. In the English translation, and also in the Greek of the Septuagint, it conveys the idea of something firm and solid. Some other translations adopt the other acceptation of it. It seems to include both; and, in that case, means something solid and spaciously extended.

This explication of the term, connected with the appearance of this firmament, or expanse, gives us the intimation of a solid and spacious extended orb, or sphere: and answers to one of the stories, which God built in the heavens.

“The heavens ‡ declare the glory of God: and the firmament sheweth his handy-work.”—Here is a clear distinction between the heavens and the firmament. By the former, are meant the heavenly bodies; and by the latter, the firmament, or expanse, in which they appear.

NOTES.

its axis, until the deluge; and, therefore, that its annual revolution round the sun, would occasion the antediluvian day to be exactly commensurate with the year.

* Taylor's Hebrew concordance, root 1826.

† The author of this memoir, being unacquainted with Hebrew, speaks of its meaning, from information only.

‡ Psalm xix. 1. Cælum hoc stellerum. Poli Syn.

The same observations may be applied to this, as have been applied to the foregoing passage.

Another, and more descriptive of such an orb, is the following one “hast thou spread out the sky, which is strong, and as a molten looking glass?” || or, as a mirror made of polished metal. The forementioned French and Latin versions, and the Greek of the Septuagint, do, in this passage, all concur with the English, in representing the sky, as strong, firm and solid. The Septuagint, especially expresses this idea with peculiar force as doth also the Hebrew original which, in this place, compares the sky to a speculum, or mirror, “made of polished metal.” §

“The elegant simile of the mirror cannot be understood, without recollecting, that the mirrors of the ancients were made of metal highly polished.” §

This description shews the sky to be not only firm and solid, but remarkably adapted to reflect light

NOTES.

|| Job xxxvii, 18. An expandit cum eo (eum adjuvando) æther vel cælos, vel firmamentum? He Græci vocant stercoma, quod firmum sit, et sua se velut virtute contentat, nulla re nixum. Æthera, vel cælos—qui solidissimi—qui sunt fortes; item, sicut speculum, fusi sive concretum.—Cælos, quibus firmitas tribuitur, Prov. viii. 28. unde poetæ cælum vocarunt chalceon ouranon. “Specula fusa” intellige ex ære vel chalybe. Vox “fortes” soliditatem denotat.—Cælum—solidissimum ut simul cohæreat. Poli Syn.

¶ Fusum, firmum, validum, in star fusi et consistentis metalli. Taylor's Hebrew concordance, root 78: 26.

§ Scott's Book of Job, pag 354.

d so far intimates the cause, why it is visible. The sky here, as the mainment in a former clause, corresponds to one of the stories, which God built in the heavens.

There are other passages, which mention the spreading out, and stretching out, of the heavens; and is as declarative of the discretion, understanding, the wisdom and power of God. But if it be a mere appearance, arising from the atmosphere-vapours, in a particular state, reflecting to us the blue rays of light; if it be a mere circumstance attendant on, or resulting from, the atmosphere; and doth not indicate the real existence of what is declared to thus spread or stretched out, it then in a comparative view, but inferior instance of wisdom and power: by no means such an instance as to entitle it to be mentioned in the climax, in which it is intended—much less to be the head or principal member of it.

The following, which is one of these passages, and in the sense of which the aforementioned versions concur with the English, will shew the climax—"He hath made the earth by his power: he hath established the world by his wisdom; and hath stretched out the heavens by his understanding."*—The earth, including its atmosphere—the world, the heavenly bodies collectively—the stretched-out heavens, or blue expanse. This remarkable climax, ascending in dignity and importance, shews, that the last and principal member of it, the expanse, not only distinct from the earth, and the whole system of the heavenly bodies, but that it surpasses them in excellence; and that it is the capital, among the works of the visible crea-

tion. The description of it, and its rank in the climax, indicate, that it is the same firmament or expanse, above described; that the same observations are applicable to it; and therefore, that this, and the parallel passages alluded to, may be adduced in further evidence of its existence; and, consequently, of the existence of an all-surrounding orb.

The same idea is held forth in a part of the address of Wisdom in Prov. viii. 27—29: the sense of which may be expressed in the following translation: which differs from the common English translation, no further than the apprehended sense of the text makes necessary. A few explanatory notes are interspersed by way of illustration.

Wisdom speaking, says,—verse 27, "When God prepared the heavens [the whole system of visible nature] I was present. When (with respect to the heaven) he set an orb around the superficies of the depth [the immense space included within the orb: in reference to which, that space may be justly called the depth]: v. 28. When he gave solidity and strength to (that orb) the sky above; and when he established its fountains of waters [its interior and exterior atmospheres]: v. 29. When (with respect to the terraqueous globe) he gave to the sea his decree, that its waters should not pass their bounds: and when he appointed the foundations of the earth, then, I was by him."

If this translation and illustration, be just, the text, which only gives the great out-lines, or capital parts of creation, strongly impresses the idea, that there is an orb surrounding all visible nature; that it is strong and solid; and that it is furnished with an interior and exterior atmosphere; all which is further descriptive of one of the stories, that God built in the heavens.

NOTE.

* Jer. ch. I. ver. 15.

In support of the translation and illustration here given, I had collected, in a marginal note, a number of authorities from Pool's synopsis: but it being somewhat long, and those who are qualified to judge in the matter, being able to recur to the synopsis, it is omitted.

Beside those authorities, and in further support of the translation, may be adduced the 148th psalm: where are enumerated, in a regular succession, the heavenly bodies, which compose the material system:—the sun, moon, stars, heavens, and waters above the heavens.

The distinct notice there taken of those bodies, and the arrangement of them according to nature, make it probable, that by the heavens (in that passage as in some others) are intended the orbs, that have been described. And, in regard to the waters above the heavens, they do plainly intimate, that those orbs are each, like the earth, environed by an atmosphere replenished with waters, to answer the same purposes with the atmospheric waters of the earth.—Of that passage, there will presently be occasion to take some farther notice.

If some happy genius, well versed in Hebrew, and the philosophy of nature, would arrange in due order and faithfully translate, those parts of scripture, that in any respect refer to the constitution and economy of nature, and this with a view of reconciling them to nature, we should probably find, that scripture philosophy and natural philosophy would mutually illustrate each other. Such a translation and illustration would be a real acquisition to science; and might lead to discoveries, of which at present we can form no idea.

One quotation more, amidst a further number that might be offered, will close the evidence.

“The heaven, and the heaven of heavens, and the earth also, are the

Lord's.” “Thou hast made heaven the heaven of heavens, with all the hosts: the earth, and the seas, and all things in them.” “Praise him ye sun and moon, ye stars, ye heaven of heavens, and ye waters above heavens.”*

There are other passages of import: but these containing all varieties of expression I have observed concerning the material heavens, system of nature, may be thought sufficient.

That the material heavens are intended, there can be no room doubt, as they are mentioned connexion with the earth—with the hosts—with the earth and seas, the things contained in them—the sun, moon, and stars—and the waters above the heavens. They are evidently considered here as forming, in conjunction with those of bodies, one vast system; whose several constituent parts are, in the clause of the quoted text, ranked in the order, in which it is natural to speak of them; and in which reckoning from the centre of solar system, they do in reality exist.

Here is a plain discrimination twixt the heaven; the heaven of heavens; and the heavens of heaven which must imply some essential difference between them. To suppose the contrary is to confound language and involve it in uncertainty. It would be to suppose those expressions void of meaning; and would be treating scripture with the indecency to which no other book, appearing to be dictated merely by common sense, would be entitled. The expressions, then, necessarily imply some essential difference in the objects of them: and what that difference

NOTE.

* Deut. x. 14. Neh. ix. 6. Ps. cxlviii. 3. 4.

s, the quotation from Amos points out. The gradation, respecting the heavens, is remarkable; and, without recurring to any thing else, suggests the idea of stories in them, or beyond the orb, as above explained. The series too, in which they are mentioned—the sun, moon, stars, heavens, and waters above the heavens—and the place they hold in the series, suggest the same idea, which is strengthened and confirmed by the express declaration, that in act there were such stories built by the Almighty: or, as it is otherwise expressed, that “he made them with all their hosts.”

The last member of the series, is the waters above the heavens. These waters, if we argue from analogy, seem to indicate and to be descriptive of atmospheres, that surround those orbs, amply provided, like our atmosphere, with waters, and other elements, proper for the support of animal and vegetable life; and for other important purposes.

The number of those stories, or concentric orbs, seems indefinite. The gradation clearly denotes a plurality of them; each having its cost—its suns, and planets, or systems. The ample spaces between them, like the space infolded by the orb, to which we more immediately belong) are beautified by those glorious bodies, which, within each of the orbs, constitute systems innumerable, serving the like noble purposes, which our solar system is calculated to serve, and doth serve.

The foregoing passages of scripture, thus interpreted, appear to agree, in their result, with the phenomena above mentioned; and, like them, to be naturally, and without force, applicable to the purpose, for which they were produced. Such agreement, it is apprehended, shews the propriety and fitness of the interpretation: as, on the other hand, a disagreement with phenomena would

prove the unsuitness or falsity of any interpretation; and manifest it to be totally inadmissible.

When scripture and phenomena thus agree, they mutually elucidate each other; and in that case, what is deducible from the one, is confirmed by the other. As, therefore, those passages agree with the phenomena, they both together corroborate the evidence, which each afforded separately, of the existence of an interior orb.

With respect to the exterior orbs, the evidence for them must rest on scripture. There can be no phenomena, from which to deduce their reality; unless the aperture, or gap abovementioned, with what it discloses, be admitted as such.

The phenomena, exhibited thro’ the aperture, are indeed remarkable; and may indicate an exterior orb, or the bright region between that and the orb, which more immediately surrounds us: in which bright region, as well as in some other of the lucid spaces in the expanse, there seems to be an uninterrupted and perpetual day.

If, in fact, there be such an aperture, the same appearances with those from which it was deduced, may indicate other apertures in the other lucid spaces, and in the Milky Way: to the ascertaining of which, the observations of the ingenious Mr. Herschell, with his large magnifiers, should he think proper to apply them to that purpose, might happily conduce.

Among the purposes, for which those apertures were intended, if they really exist, this may be one—to give the intra-orbic and trans-orbic systems some intimation of each other, and of their mutual relation; and to afford them a glimpse of the grand, complicated system, of which they are parts.

The immensity of those orbs, doth not invalidate their existence: on the D

contrary, immensity is so congenial to our ideas of the Creator, and his works, that it affords, as applied to those orbs, an internal presumptive proof of their reality.

On the supposition of their existence, what an assemblage of glorious bodies do they exhibit—peopled by an unlimited variety of beings—and arranged in a gradation beautiful and astonishing! Trace the gradation, from the smaller to the larger planets, circling around their sun, and with him forming a magnificent system! Trace it from that system, through successive systems, to their surrounding orb! Trace it from orb to orb, and through their several hosts of systems, up to the superior orb, and its ambient atmosphere! Trace it in every possible direction, from the common centre to the utmost verge of that atmosphere, and the most wonderful phenomena, in a rapture-inspiring succession, strike the mental eye!—impressing the idea of a complete whole, self-balanced, and held in union by universal gravitation!—exhibiting a superlatively grand system of systems, embosomed in the infinite, all-comprehending essence of the Creator!

Grand and magnificent as this system is, there may be another, incomparably more so, composed of myriads of such systems, governed by the same laws, and, with it, surrounded by an immense orb, to counter-balance the gravitation of the included systems.

That other system may be a part of a still more splendid one, formed on the same plan; and this latter may enter into the composition of other systems, beyond comparison superior to it; each succeeding system, in a regular progression, rising in dignity and splendor. And thus we may go on, enlarging our idea of those systems, indefinitely.

What is there, to check that idea,

when we consider the infinity of space, in connexion with the infinite wisdom, power, and benevolence of the author of nature—and, at the same time, reflect, that infinite space is the proper and only adequate theatre, for the display of those perfections, and of such a character?

This hypothesis, by introducing solid orbs, may possibly, on a superficial view of it, be thought a revival of the ancient or Ptolemaean system, and to grow out of it. But on the contrary, it will be found, upon examination, totally inconsistent with it; and to be, in reality, the offspring of the new philosophy; derived from the grand principle of that philosophy—universal gravitation.

Upon the whole—the hypothesis, so far as it relates to the existence of the interior orb, immediately surrounding the visible heavens, the author of it apprehends to be a probable deduction from the principles of gravitation; and to be deducible also from phenomena, and scripture. He offers it for consideration, with the hope, that, if it should appear not wholly groundless, it may be productive of a happier illustration.



A theory of lightning, and thunder-storms, by Andrew Oliver esq. of Salem in the State of Massachusetts.

IT has been generally, and, considering the phenomena themselves very naturally, supposed, that the electric charges, which are exhibited in repeated flashes of lightning during a thunder storm, are previously accumulated in the vapours which constitute the cloud; and that these vapours, when by any means they become either over-charged with electric matter, or are deprived of their

natural quantities of it*, discharge their surplusage to, or receive the necessary supplies from, either the earth or the neighbouring clouds, in successive explosions, till an equilibrium is restored between them. But I shall endeavour, in the following pages, to prove, that these charges reside, not in the cloud, or vapours of which it consists, but in the air which sustains them—and that, previous to the formation of the cloud, or even the ascent of the vapours of which it is formed. But in order to convey my ideas, upon this subject, with perspicuity, I find it necessary to introduce them with a quotation from dr. Franklin's letters on electricity, in which the doctor compares water, whether in its natural state, or rarefied into vapours, to a sponge; and the electric fluid, in connexion with it, to water applied to the sponge.

“When a sponge, says he, is somewhat condensed, by being squeezed between the fingers, it will not receive and retain so much water, as when it is in its more loose and open state. If more squeezed and condensed, some of the water will come out of its inner parts, and flow on the surface. If the pressure of the fingers be entirely removed, the sponge will not only resume what was lately forced out, but attract an additional quantity. As the sponge, in its rarer state, will naturally attract and absorb more water—and, in its denser state, will naturally attract and absorb less water—we may call the quantity it absorbs in either state, its natural quantity, the state being considered.”

NOTE.

* A body is said to be electrically charged, whenever it has either more or less than its natural quantity of electric matter.

The doctor then supposes “that what the sponge is to water, the same is water to the electric fluid;—that, when a portion of water is in its common dense state, it can hold no more electric fluid, than it has; if any be added, it spreads upon the surface.” He adds, “when the same portion of water is rarefied into vapour, and forms a cloud, it is then capable of receiving and absorbing a much greater quantity, as there is room for each particle to have an electric atmosphere. Thus water, in its rarefied state, or in the form of a cloud, will be in a negative state of electricity; it will have less than its natural quantity, that is, less than it is naturally capable of attracting and absorbing in that state*.”

The foregoing passages I have copied *verbatim* from that celebrated electrician; as I purpose, in the course of this essay, to avail myself of his idea of the sponge, in order to illustrate a different theory of thunder clouds, which I now beg leave, (though with diffidence of my own judgment, and with all due deference to that of so great a man) to substitute in the room of the foregoing; which, I must confess, at first sight, carries great appearance of probability with it, and is highly corroborated by the curious and beautiful experiment the doctor made with the silver can, bra's chain, and lock of cotton†.

But in reading doctor Priestley's history of electricity, some thoughts of Signor Beccaria occurred, which satisfied me, that this hypothesis, however ingenious and plausible, was insufficient for the purpose of accounting for the rise and pheno-

NOTE.

* Franklin's letters, page 119.

† Page 121.

mena of thunder storms; the frequent extent, and violence of which, seem to require a more general cause, than that hinted above, to supply them with sufficient quantities of electric matter.

"Considering the vast quantity of electric fire, that appears in the most simple thunder storms," says doctor Priestley†, "Signor Beccaria thinks it impossible, that any cloud, or number of clouds, should ever contain it all, so as either to discharge or receive it. Besides, during the progress and increase of the storm, though the lightning frequently struck to the earth, the same clouds were the next moment ready to make a still greater discharge, and his apparatus continued to be as much affected as ever. The clouds must consequently have received, at one place, the moment that a discharge was made from them in another.

Signor Beccaria accounts for this vast exhibition of electric fire from a thunder cloud, by supposing, that some parts of the earth may become more highly charged with the electric fluid than others, and that great quantities of it do sometimes rush out of particular parts, and rise through the air, into the higher regions of the atmosphere; other parts of the earth becoming casually destitute of their natural quantity of the fluid at the same time, and ready to receive it: that a chain of clouds nearly contiguous, or a single cloud, extending from one of these regions to another, in an opposite state, might serve as a conductor or conductors, to restore the electric equilibrium between them, which would equally cause thunder and lightning

in both regions, and throughout the intermediate clouds*. Here doctor Priestley justly observes, that "the greatest difficulty, attending this theory of the origin of thunder storms, relates to the collection and insulation of electric matter, within the body of the earth." With regard to the collection, the doctor observes, that his author "has nothing particular to say:" nor indeed, without a previous insulation of those parts of the earth, which may be concerned in the production of the phenomena, can any such collection take place. Now if we consider, that, in order to have two regions of the earth thus insulated, and of sufficient dimensions, one to supply, and the other to receive the quantities of electric fire, discharged during one thunder storm of any extent and continuance, the parts insulated must not be superficial regions, but must reach to a considerable depth; we must suppose, with doctor Priestley, "that the electric matter, which forms and animates the thunder cloud, issues from places far below the surface of the earth, and that it bubbles itself theret." But, with deference to the judgment of that unwearied friend to science, I apprehend, that such an insulation is hardly consistent with that distribution of conductors, especially of water, which provident nature has made through all parts of our globe; the highest mountains being furnished with internal springs and fountains, and watered externally by rivulets, which derive their origin from condensing mists or melting snows upon their summits: while the surface of the earth in general, not excepting the most sandy deserts, affords supplies of water, to those who will be

NOTE.

† Priestley's history of electricity, page 325.

NOTES.

* *ibid.*

† Priestley, page 335.

the pains of digging for it. If the vapours, which constitute the cloud, are, of themselves, incapable of furnishing such quantities of electric matter as are necessary for the repeated discharges in a severe thunder storm, as Signor Beccaria thinks they are, and as seems to me doubtful; and if the insulations of large portions of the surface or exterior parts of the earth, which are absolutely necessary to support Beccaria's hypothesis, cannot take place; and, how they can in our terraqueous mass, is difficult to conceive, consistently with the hitherto discovered properties of the electric fluid,) we must seek for some other substance in nature, which may be capable of affording those reiterated supplies of that powerful element, which are usually exhibited in a thunder storm. This, I presume, we shall find in the atmosphere over our heads; not in the vapours which float therein, but in the air itself which sustains them.

Air is by electricians justly classed with electric substances, as it possesses the same general properties, in common with others of that denomination, particular instances of which may occur in the following pages; wherein I shall endeavour to prove,

I. That the electric capacity of air is lessened by condensation.

II. That this capacity is increased by heat.

Premising, that by air I here mean that fluid in its common compressed state, with us, near the surface of the earth; and by its electric capacity, that state of it, which disposes it, under any circumstances whatever, "to attract, absorb and retain," what doctor Franklin calls its natural quantity, or the quantity which is natural to it in that state.

I. I shall endeavour to prove, that the electric capacity of air is lessened by condensation.

That a change of density in air produces also a change in its electric capacity (as above defined,) follows from some experiments of monsieur de Faye and doctor Priestley, the former of whom found, upon repeated trials, that no electricity could be excited by the friction of a glass tube, in which the air was condensed*. The doctor, repeating the experiments with some variation, found, that, when one additional atmosphere was forced into the tube, the electricity, excited by rubbing it, was scarcely discernible. Now, though the effect was a suspension of the operation of the excited tube without, the cause was evidently the condensed state of the air within; which may be accounted for, if we consider, that, although it is certain, from many experiments, that glass is absolutely impermeable to the electric fluid, inasmuch that it cannot force its way through a pane of glass, or the sides of a phial, without breaking the glass, (as was the case in those spontaneous discharges of several of the jars in the electrical battery mentioned by doctor Priestley†) yet it is as certain, that this impermeability of the glass to the fluid itself, is no obstruction to the operation of that repellent power, upon which the visible effects of this element seem principally to depend; which power undeniably acts from one side of the glass, through the very substance of it, upon the same fluid on the other side, provided there be any other substance on that side, capable of receiving it, when thus repelled.

This is the case in the Leyden experiment, in every form, in which it can be made; the charge given to one side of the glass, repelling and throwing off an equal quantity of the

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* Page 50. † Page 489.

electric fluid from the opposite surface, through the non-electric coating, in contact with it; nor can any charge be given to either side, without a proportional discharge from the other. In like manner, when an uncoated tube is excited by friction, a quantity of the fluid, equal to that which is excited and condensed upon the outer surface, is thrown out from the inner, provided there is any substance within, in a capacity to receive and absorb it, without which no excitation can take place, "A glass tube, out of which the air is exhausted, discovers no signs of electricity outwards*," there being no substance within capable of receiving and absorbing the fluid from the inner surface, which, though repelled from it inwards during the operation, yet returns to it again instantly, upon a cessation of the action of the rubber without. But upon a readmission of air, the excitation is easy, and is attended with the usual effects. Air, then, which is the only substance admitted (excepting perhaps a few straggling vapours which float in it) receives and absorbs a sufficient quantity of the electric fluid from the inner surface, to permit an excitation of the tube, which contains it. But as we have seen, that air, when condensed within, prevents the visible effects of an excitation, equally with a total vacuity, we may adopt the idea of doctor Franklin, *mutatis mutandis*, and conclude, that "what the sponge is to water, the same is air to the electric fluid:" at least that this capacity of air is lessened by condensation, in a manner, not indeed perfectly similar, but, somewhat analogous to that, in which the capacity of a sponge, to receive

and retain water, is lessened by compression. Agreeably to which idea the condensed air within the tube having its electric capacity filled and even crowded, with the electric matter, will receive none from the inner surface, which, on the contrary, is thereby prevented from being forced out of it; without which, no air can be forced into, or condensed upon the outer surface, so as to exhibit any signs of electricity; as observed before.

II. I shall endeavour to prove, that the electric capacity of air is increased by heat.

This also appears probable, at least from the above-cited experiments of doctor Priestley; for, after the air, in his tube, had had this capacity so far diminished by condensation, not to permit an excitation without that capacity, together with the consequent excitability of the tube, was restored, by the action of heat upon the included air, "Repeating the attempts (says he) to excite the tube above mentioned, I found, that, after very hard rubbing, it began to act a little, and that its virtue increased with the labour. Thinking it might be the warmth which produced this effect, I held the tube to the fire, and found, that, when it was pretty hot, it would act almost as well, as when it contained no more than its usual quantity of air*."

In page 553, doctor Priestley tells us, that some of his electrical friends were of opinion, "that the reason why a tube, with condensed air in it cannot be excited, is, that the dense air within prevents the electric fluid from being forced out of the inside of the tube, without which none can be forced into the outer

NOTE.

* Priestley's history of electricity, page 550.

NOTE.

* Page 551.

side; and that heating the tube makes the air within less electrical;" at is, (as I conceive their meaning) puts it in a capacity, to receive and absorb more of the electric fluid, than it could otherwise do in that condensed state. The doctor indeed asks, by way of objection to the foregoing solution,—“How, upon this principle, can a solid stick of glass be excited?” To which I could answer, that possibly, when a solid stick of glass is excited, as much of the electric fluid may be drawn out of one side of it, as is thrown into or condensed upon the other: if so, although it may shew equal signs of electricity on both sides, yet one side will be in a positive, the other in a negative state; when it will exactly resemble the curious stone, called the Tourmalin, by some *lapis electricus*, which, doctor Priestley says,* has always, at the same time, a positive and a negative electricity; one of its sides being in one state, and the other in the opposite; which does not depend upon the external form “of the stone.” But the truth of this solution must be determined by future experiments.

That the electric state of the air is liable to be affected by heat, is further evident, from a course of experiments, which were made by the abbé Mazeas, with an apparatus, that was constructed solely with a view of determining the electricity of the atmosphere, anno 1753†. With this apparatus, the abbé observed, that, from the 17th of June, when he began his experiments, the electricity of the air was sensibly felt every day, from sun rise till seven or eight o'clock in the evening, when the weather was dry; but that, in the driest nights of that summer he could

discover no signs of electricity in the air, nor till the morning, when the sun began to appear above the horizon; and that “they vanished again in the evening, about half an hour after sun-set;” and further “that the strongest common electricity of the atmosphere, during the summer, was perceived in the month of July, on a very dry day, the heavens being very clear, and the sun extremely hot.”

Now, as this electricity of the air was sensible only during day-light, no electricity being discoverable therein, even in the driest nights, and as the air exhibited the strongest signs of electricity, when the sun shone extremely hot; is not the conclusion unavoidable, that heat somehow affects the electric capacity of air, either enlarging it, and thereby disposing the air to attract, receive and absorb greater quantities of electric matter, than it is capable of absorbing in its natural state; or superadding, to its natural quantity, more than it can absorb, and thereby disposing it to throw off the redundancy upon any objects, which may be in a situation to receive it? One or the other seems necessarily to follow: but the former is most agreeable to doctor Priestley's experiment of the condensed air, in the tube above mentioned; and is perfectly consonant with the observations of doctor Franklin, mr. Kinnerley, and others, that thunder clouds are generally in the negative state of electricity*. But more upon this head hereafter. I would however

NOTE.

*Epitome of Phil. Transf. Gent. Mag. Sept. 1773, page 447. Mr. Henley thinks, that cold electrifies the atmosphere positively; and thence conjectures, that heat electrifies it negatively. His conclusions are founded upon a course of experiments.

NOTES.

*Page 299. † Page 342.

observe here, that many, and perhaps all other, electric substances, even the most firm and solid, as well as air, are liable to have their electric capacities thus diversified by heat, more particularly the Tourmalin above mentioned. But as, in treating of the properties of this stone, doctor Priestley has thought it deserving of a distinct section in his electric history, to that I shall refer the reader, for a particular account of them†; wherein he will find a discovery, made by messrs. Canton and Wilson, that these properties are not peculiar to the Tourmalin, but that many gems have a natural disposition to afford the same appearances: whence we may conclude, as above, by analogy, that all electric substances are more or less affected in like manner, by the same cause. But, to return to the subject:

If, from the foregoing considerations, the reader should be satisfied, that the electric capacity of air, in its condensed state, in the lower regions of the atmosphere, is liable to be diminished by a further condensation, and that, *ceteris paribus*, it is increased by heat, and *vice versa*; the solution of the phenomena of thunder and lightning, to his satisfaction, upon electrical principles, will perhaps be no difficult task.

For, let us conceive a region of the atmosphere, extending over a large tract of country, to be rarefied and heated, during a hot summer's day, not only by the passage of the sun's direct rays through it, and by the reflexion of those rays from the surface of the earth into but it; chiefly by the communication of the heat acquired by that surface: the electric capacity of that region of air would be increased, both on account of the heat it undergoes, and of the rarefaction consequent upon that heat: it will then have less than its natural

quantity, or the quantity it is naturally disposed to receive and absorb in that state; it will consequently be, in the language of electricians negatively electrified, or in a craving state, requiring and forcing supplies from all substances capable of affording them, provided it be itself in a condition to receive them. But however craving, it cannot receive the supplies from the neighbouring regions of the atmosphere, while the regions severally remain in the state of pure air, (even supposing the latter to possess more than their natural quantities, and thereby as much disposed to impart, as the former is to receive them,) without the intervention of non-electric conductors; and that, owing to the impermeability of air, as such, to the electric fluid. This I shall endeavour, 1. To illustrate by experiments made with glass. 2. To prove by experiments made upon air itself.

1. If a pane of glass be coated on both sides, by the application of plates of tin to them, the glass may be charged in the same manner, as the Leyden phial: when, after the removal of the plates, (no discharge having previously taken place,) both sides of the glass will remain charged, one positively, the other negatively; the former having more than its natural quantity, the latter being proportionably deficient, and in a craving state. These states both surfaces will obstinately maintain for a long time: nor do I know of any method of restoring the electrical equilibrium between them, but, either to immerse the pane in water, or some other non-electric fluid, which will do it instantly, and silently; or to re-apply the metalline coatings on both sides, as they were placed first, with a good conductor introduced between them, which will answer the same purpose, and be attended with an explosion, or some

park and snap ; or lastly, to place it in a situation where it may be exposed to air replete with moist vapours, where, after some time, the vapours will, by condensing upon each side, furnish it with a moisture equivalent to a non-electric coating, while the vapours, which remain in the surrounding air, will, by continually ripening upon, and receding from the two surfaces, at length restore both to their natural state.

It is evident, from the foregoing experiment, first, that the charges reside in the glass itself, as they remain after the coatings are removed. Secondly, that the opposite sides have a very strong propensity, one to give, the other to receive the fluid, and thereby to restore the electric equilibrium between themselves ; which is done with violence, as observed above, when they are put in condition of doing it by the re-application of the metalline coatings, with a conductor between them ; and lastly, that notwithstanding the violent propensity, in the side of the glass, to restore themselves and each other to their natural electric states, and the small distance between them, they can never effect it, without the intervention of non-electric conductors.

2. I shall now shew, by other experiments, that different regions or strata of air may become charged, both positively and negatively, in the same manner as the sides of the pane of glass were in the foregoing ; and that the effects of such charges are precisely the same.

Messrs. Wilkie and Æpinus at Berlin, having the hint naturally suggested to them, by a previous course of experiments, endeavoured to give the electrical shock by means of air, in the same manner, in which it may be given by glass ; “ in which, after making several attempts,” says Dr.

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Priestley*, “ they at length succeeded, “ by suspending large boards of wood, “ covered with tin, with the flat sides “ towards one another, and at some “ inches asunder. For they found “ that upon electrifying one of the “ boards positively, the other was “ always negative. But the discovery was made complete and indisputable, by a person’s touching “ one of the plates with one hand, “ and bringing his other hand “ to the other plate ; for he then received a shock through his body, “ exactly like that of the Leyden “ experiment. With this plate of “ air, as we may call it, they made a “ variety of experiments. The two “ metal plates, being in opposite “ states, strongly attracted one another, and would have rushed together if they had not been kept asunder by the strings. Sometimes the electricity of both would be discharged by a strong spark between them, as when a pane of glass bursts, with too great a charge. A finger, put between them, promoted the discharge, and felt the shock. If an eminence was made on either of the plates, the self-discharge would always be made through it ; and a pointed body, fixed upon either of them, prevented their being charged at all.”

To the foregoing relation of the experiments themselves, I shall subjoin the conclusions drawn from them, by the curious electricians who made them, in the words of doctor Priestley, viz. “ The state of these two “ plates, they”, Wilkie and Æpinus, “ excellently observe, justly represents the state of the clouds and “ the earth” (and perhaps of diffe-

NOTE.

* Page 243.

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rent clouds, at various heights, one over another) “ during a thunder storm; the clouds being always in one state, and the earth in the opposite; while the body of air between them, answers the same purpose, as the small plate of air between the boards, or the plate of glass between the two metal coatings, in the Leyden experiment. “ The phenomenon of lightning is the bursting of the plate of air by a spontaneous discharge, which is always made through eminences; and the bodies, through which the discharge is made, are violently “ shocked.”

As in the former experiment, made with the pane of glass, the charges both positive and negative, reside in the glass itself, and not in the coatings, those remaining, after these are removed; so in the latter, which is completely analogous to it, the charges are accumulated, and reside in the air situated between the boards, and not in their tin linings, which serve only as conductors, to distribute the fluid equally over, or to convey it equally from, the whole surface of air which is limited by, and in contact with them, on either side; whereby the whole of each surface may be equally charged, at the same time, or discharged by the same explosion.

If two or more regions of the atmosphere, when free from vapours, become thus differently electrical in their state and capacities, which, that they may, from the heat and consequent rarefaction in a summer's day, we have already seen, and perhaps from a variety of other causes to us unknown—and if, from the contrary currents of air, which frequently take place, at different heights, they should perchance become situated one over or adjacent to another, like strata of minerals within the bowels of the earth—what the metalline coating is

to the pane of glass, or the tinned boards to the plate of air, in the last experiment, the same would clouds, formed and floating therein, be to these regions of air; the electric equilibrium between which might be restored through their intervention, either by spontaneous discharges through the pure air between them, in severe flashes of lightning, or through the falling drops of rain, which in their successive descent, form a chain of natural conductors between one region of the air and another, and betwixt each of them and the earth; the passage of the electric fluid through which, would also be attended with lightning and thunder, but not so severe as when the discharge is made through the pure air; the most fatal lightning usually preceding the fall of the rain.

It is not uncommon, during the rise and progress of a thunder storm to see different sets of clouds, at various heights in the atmosphere, moving promiscuously in all directions as though they were impelled hither and thither by contending winds when probably the whole phenomenon arises from the different electrical states of the regions of the air, in which they float; as they approach one or other of which, they are attracted or repelled, and move accordingly, communicating, receiving or transmitting the electric fluid, to or from them respectively, as they may be either deficient of their natural quantity, or possess a redundancy of this fluid. And as in the experiment of messrs. Wilkie and Æpinus mentioned above, the two tin plates with the boards they covered, would have rushed together, had they not been kept asunder by the strings, if these clouds, floating freely in air and being at liberty to act upon every impulse, gradually coalesce restoring the electric equilibrium to

the neighbouring atmosphere by repeated discharges, as they unite*; till at length they form one dense mass of humid vapours, which precipitating in a heavy shower of rain, refresh the thirsty soil, leaving the atmosphere above in a homogenous electric state, calm and serene.

How these clouds are generated, formed, and adapted to those grand purposes in the economy of nature, is next to be considered: in prosecution of which enquiry, I shall submit the following observations to the candour of the reader.

Whatever the immediate cause of evaporation may be, it is certain that the superficial moisture of all bodies is perpetually exhaling in vapours, which ascend into the higher regions of the atmosphere, where they gather and are formed into clouds, and at length re-condense, descending in dew, mist, or rain upon the surface of the earth, from whence they sprang.

These vapours are either detached in streams from the humid ground, by the influence of the sun, or thrown off by the perspirations of those infinite multitudes of animals and plants, which cover the face of the earth†, or supplied by evaporation, from the ocean, or other grand collections of water.

Ignorant as we are of the nature of these operations, and of the manner in which they are performed, it is natural to suppose, that the vapours

NOTES.

* It is certain, that, in most thunder storms, the flashes of lightning are chiefly discharged from cloud to cloud; very few, and frequently none at all taking place between the cloud and the earth.

† See Hales's vegetable statics, and Chambers's Cyclopaedia, under the word, perspiration.

themselves ascend in the same electric state, whether positive, neutral or negative, with the substances from which they arise. Accordingly, signior Beccaria, in making some of his experiments, observed, that "steam, rising from an electrified eolipile, diffuses itself with the same uniformity, with which thunder clouds spread themselves and swell into arches, extending itself towards any conducting substance‡."

This stream then was electrified, as well as the eolipile, from whence it proceeded. The sea must necessarily be supposed, in common with the whole terraqueous mass, to contain just its natural quantity of the electric fluid, and no more: we may therefore conclude, that both the vapours which arise immediately from it, and the air which sustains them, and from its situation enjoys a more equal temperature, than that over the land, are in the same electrical state with the sea itself, containing neither more nor less than their natural quantity.

Considering the vast extent of the ocean, and the comparatively small degree of moisture of which the dry land is susceptible, we may conclude, that a very small proportion of the clouds, which are formed in the atmosphere are exhaled from the latter, and that the ocean is the grand source from whence they principally derive their origin. Our senses accordingly convince us that the sea air is always replete with moist vapours, even when its natural transparency is not in the least interrupted by them. Hence in a hot summer's day, when the wind suddenly shifts from west to east, we immediately perceive a chill from the sea-breeze; and sometimes long before the thermometer indicates a

NOTE.

‡ Priestley's history, page 327.

change in the temperature of the atmosphere. These vapours, when they first arise from the sea, are generally so nearly of the same density with the surrounding and contiguous air, that the rays of light, in passing through them, undergo no sensible change in their refraction; they are therefore at first generally invisible; but when the weather is extremely cold, and the air, of consequence, uncommonly dense, they are always visible, and appear like a steam arising from boiling water*. Not that vapours ascend most copiously in the coldest seasons, which seems contrary both to reason and experience; but that the different densities of the air, next the surface of the water, and of the vapours which ascend in it, render the latter visible, by the irregular refractions of the rays of light in passing through them. For the same reason, our breath is visible in the winter, but not in warm weather.

Let us now suppose the atmosphere, on a summer's morning, to be all around in a homogenous state, as indicated by a cloudless sky and a dead calm. As the sun rises on the eastern coasts of America, and warms and rarefies the atmosphere eastward, the rarefied air naturally ascends, and a current of air as naturally flows thither from the opposite quarter, which is but just emerging from the cool shades of night, to supply its place: the consequence of which is a light westerly breeze. As the sun ascends higher, the air over the land becomes heated and rarefied, both by the passage of the sun's direct and reflected rays through it, and by the reverberation of the heat, acquired from

them by the surface of the earth; till at length that whole region of the atmosphere has its electrical capacity enlarged, thereby becoming negatively electrified, or in a craving state, as observed before. On the contrary, the sun's rays, which fall upon the surface of the sea, especially when ruffled by wind, chiefly enter that transparent medium, in which they are refracted and irrecoverably absorbed; very few, comparatively, being reflected; whence very little heat can be reverberated from that element to warm the incumbent air, which is sensibly affected only by the passage of the sun's direct rays through it, unless the weather be calm and the surface very smooth†. Besides, it is colder at sea than ashore in the summer season, when, and when only thunder showers are fre-

NOTE.

† In a perfect calm, the surface of the sea acts like a mirror upon the sun's rays, strongly reverberating them back into the atmosphere, when the heat is as sensible upon water as upon the dry land. But whenever that surface becomes agitated and broken by the force of wind acting upon it, those rays, by perpetually impinging upon an infinite variety of new formed, fluctuating surfaces undergo innumerable refractions, in all directions, whereby they are absorbed and lost within the fluid mass in some proportion to the violence of the agitation. Accordingly, when the weather is serene and calm, the surface, like a looking-glass, reflects the phenomena of the sky overhead upon the first springing up of a breeze, it changes to a light blue which deepens to a fine sky-blue as the wind rises, to a deeper sea-green in a brisk gale, and to a sullen blackness in a storm, excepting when the waves are interspersed with white heads of foam, which, by contrast only render the scene more gloomy.

NOTE.

* This is always the appearance in a clear, still morning, when the mercury in Fahrenheit's thermometer is at 0, or below it.

quent, and indeed warmer in winter, for the following reason, viz. as the sea is every moment changing its surface, neither heat nor cold can affect it so soon as they do the surface of the earth, which continues the same.

The air over the land, when thoroughly heated and rarefied, naturally ascends into the higher regions, while the denser air from the sea, necessarily flows in, and takes its place. Hence, probably, the easterly winds which usually spring up near the middle of the day, after a sultry morning.

This body of warm air ascends till it arrives at that region of the atmosphere in which thunder clouds are formed; while the vapours, which are waisted to the continent by the eastern current, being attracted by this now superior air, which demands a supply of the electric fluid, continually ascend, till they arrive at it, leaving the denser air, with which they were first connected, behind. As these vapours move freely through and mix with air, they easily insinuate themselves between the particles of that fluid, and unite with it, whereby every particle of air, which, from the causes aforesaid, is become in any degree destitute of the quantity of electric matter which is natural to it, in its present state, may and will attract and attach to itself one or more particles of this vapour, and thereby furnish itself with a non-electric coating, and thus become qualified to receive from any neighbouring object such a supply of the electric fluid, as its state may demand.

Thus provided, this body of air, together with the vapours which are more or less attached to every particle of it, will constitute a dense cloud; and as the air itself was before (by supposition) in a craving or negative state of electricity—and as the vapours are presumed to have arisen from the ocean in their natural or

neutral state, the whole body of a cloud formed by them, will still be in a negative state, and thereby constitute a complete thunder cloud; which, when formed, if uniform in density and contexture, should it be attracted within the striking distance from any object standing upon the earth, would have its electric equilibrium restored at once by a flash of lightning darting from the earth: or, should it pass near another cloud in a different state, the flash would restore an equilibrium between the two clouds.

That a body of air, either in a positive or negative state of electricity, while pure, should be incapable of communicating its surplusage of the electric element to, or receiving supplies from the neighbouring regions, though in a contrary state—and that the same air, when replete with watry vapours, may be restored to an equilibrium throughout its whole extent, by an instantaneous discharge—may yet require some further evidence, before it be admitted.

But, as the particles both of air and vapour, are severally too minute to fall under our notice, I shall endeavour to illustrate by analogy, what cannot be directly demonstrated by experiment. In order to this, I shall first give a general description of, and then subjoin some observations upon doctor Priestley's electrical battery.

This battery consisted of sixty-four cylindrical glass jars, fixed in a square box; the jars were coated within and without with tin foil, and the floor of the box was covered with the same, whereby the outsides of all the jars formed but one continued electrical surface. In like manner, by means of small brass bars extending over the mouths of the jars in their several ranges, and by wires, which connected the several bars, together with others which descended from them, communicating with the inner coating of each jar, their interi-

or surfaces were so connected, as to form, in the same sense, but one surface. Thus constructed, the whole battery is capable of being equally charged in every part at the same time, and of being discharged throughout, by the same explosion.

Here I would observe, that if, instead of the metalline coatings, the jars were filled with water to the same height with them, and were immersed in the same order in a square vessel of water, to an equal depth, the bars and wire remaining as before, the success of all the experiments made with them, would be the same as above. Let then a battery be constructed and charged in this form; after which, let the bars and wires aforesaid be removed, and the water, contained in the jars, be decanted off by glass syphons, and let the water be drawn off from the vessel in which they stand. It is evident, from the experiment of the charged pane of glass, already mentioned, and other experiments, recited in doctor Franklin's letters, that these jars will remain severally charged, as they were jointly before. They may now, when dry, be taken out, and handled at pleasure, with safety; nor can they be easily restored to their natural states, but either by immersing them singly under water, or by replacing the whole apparatus, and filling both the jars, and the box which contains them, with water as at first, and introducing a metalline conductor between the water without the jars, and any one of the wires which connect their insides; then the whole will be instantly discharged with an explosion*.

NOTE.

* These experiments I never saw particularly made, but the conclusions necessarily follow from some which I have seen, as well as from those pointed out above.

To apply these observations to the present subject, we may regard every particle of a body of pure†, but incidentally electrified air, in the same light with one of the jars in the battery aforesaid, which, after having been charged, is deprived of its adventitious coatings: each particle like one of those jars, will retain the state it may happen to be in, so long as it remains destitute of a conducting appendage. But when, and by what means soever, a sufficiency of moist vapours shall become interspersed amongst these particles of air to furnish them severally with non electric coatings, and by the nearness or contiguity of these vapour to form a communication from one to another, throughout the whole they will then be in the same connected state with the jars in the battery, when complete in every part and charged; and like those jars, be the particles ever so numerous, they will be in a capacity of jointly receiving or communicating the electric fire. And as, by the addition of jars in the construction of the battery, the explosion at the discharge may be increased indefinitely—so will the violence of the explosion from a thunder cloud, be increased in proportion to its extent, and to the multitude of aerial particles, together with their appendant vapours, of which it consists, and which are so connected, as to be capable of uniting in the same discharge. But as a thunder cloud is not usually formed at once, but by degrees, smaller clouds generally forming themselves in separate parties before they join the main body—and as the electrical

NOTE.

† Pure as to the purposes of electricity, or free from conducting vapours; perhaps pure elementary air is not to be found in our atmosphere

ates of these clouds may be very different from each other, from the different electrical states of those parts of the atmosphere in which they gather—the general equilibrium of the atmosphere over a country, cannot be restored by a single discharge, but successive flashes will dart from cloud to cloud, and between these and the earth, till at length the whole collected mass of vapour is spent and dissolved in rain.

Here a common observation naturally occurs, viz. that frequently, after a flash of lightning, a sudden shower descends in large drops. The mutual attraction between the vapours and the air, when in this electrical state, is sufficient to sustain the former, notwithstanding that they are by this attraction greatly condensed, being as it were forced into physical contact, both with the particles of air, and with each other*.

NOTE.

* A gentleman of my acquaintance, who is both intelligent and curious, informed me some years since, that he was once upon the top of a mountain in Spain, upon which a thunder cloud gathered; that as soon as the cloud became insulated from the mountain, it discharged a violent tempest of thunder and lightning upon the plains below; that he never was so thoroughly soaked in the most violent shower, as when in the body of this cloud, though without a drop of rain, feeling as if he had been immersed in a river. This idea is further justified by the solid appearance of the clouds, that rise in the west, on a hot summer's day, compared with those which float in the atmosphere at other seasons; which shews a manifest difference in their density and contexture. And when we observe attentively the several parts of a thunder cloud, the

But as soon as the air is restored to its natural electric state by a flash of lightning, this attraction ceases, and the vapours precipitate by their own specific gravity in a heavy shower.

Long and extensive calms, in certain latitudes and seasons, take place upon the ocean, during the continuance of which, the heat is scarcely tolerable†. Where these take place, the air will naturally undergo the same changes, in its density and electric capacity, as the air over the land does in the summer season, and, when sufficiently heated and rarefied, will, in like manner, ascend, its place being supplied by the denser air from all quarters without the limits of the calm. This heated and consequently (granting the principles of the present theory) electrical air, when raised to a certain height in the atmosphere, may become as well adapted to the formation of a thunder cloud, from the vapours which are perpetually exhaling from the sea, as the air over the land under the like circumstances. Wherefore, in some lati-

NOTES.

distinctness of their borders and their swelling furbeloes—how strongly they reflect the rays of the sun, thereby exhibiting the most vivid lights and deep contrasting shades—and on the other hand observe the beautiful effects of their refractive power, in the intense golden skirts which adorn the rising cloud, with a setting sun behind it—we must necessarily conclude, that, although the vapours, of which such clouds consist, are collected and condensed in higher regions of the atmosphere, than are those which usually form clouds at other seasons, yet their density and specific gravity is much greater; and they derive their support from the electric principle.

† See note, page 236.

tudes in all seasons, and perhaps in all latitudes in different seasons of the year, thunder storms may as well happen at sea, even at remote distances from land, as ashore.

I now proceed to consider an objection, which may be raised against the foregoing theory, which I shall first state in its full force, and then endeavour to give a satisfactory answer to it.

Objection. If the electrification of that body of air, in which a thunder cloud is formed, depends upon the heat it has previously acquired, whence is it that thunder storms are frequently attended with showers of hail, which hail is sometimes so large as to indicate its descent from the coldest regions of the atmosphere?

Answer. Sir Isaac Newton asserts, from experiments of his own, that "the density of the air in the atmosphere of the earth is as the weight of the whole incumbent air." Consequently, the air gradually decreases in density from the surface of the earth to the top of the atmosphere. The body of air which is supposed in this theory to be qualified by the action of heat upon it, to become a proper *substratum* for the formation and support of a thunder cloud, is thereby expanded and rarefied, and thence becomes specifically higher than it was before: it therefore ascends till it arrives at that height in the atmosphere, at which the air is naturally, from its situation, of the same rarity with itself; and there it rests in equilibrio. This region is extremely cold at all seasons, as appears from the testimonies of travellers who have visited the tops of very high mountains, even under the line. The greater the heat, which this body of air requires below, the greater degree of rarefaction it undergoes, and the higher, of consequence, it ascends in the atmosphere,

where the cold is proportionably more severe, than is usual near the surface of the earth. But though it was the heat which it acquired below, that first rarefied and expanded it, it will by means be proportionably re-condensed by the cold which it meets with in its ascent; for as the heat, which occasioned its rarefaction, decreases upon that account, the pressure of the incumbent atmosphere upon it, decreases as it rises, whereby its density may, upon the whole, remain nearly the same; if so, may we not suppose its electrical state also, previous to the formation of the cloud, to continue nearly the same? for should this warm air ascend all together in a body, without intermixing with the denser surrounding air through which it rises, as a bubble of air does in any other fluid, and this air probably would in a calm season, the denser parts of the atmosphere easily giving way to it, till it arrives at that region, the density of which is equal to its own, when it would be at rest; should this, I say, be the case, it would not, even in that cold region, cool so suddenly as to undergo any immediate change in its electrical state, from the natural coldness of the region; neither would it be from condensation, its density remaining nearly the same, as observed above.

But when the cloud is formed or rather when a number of clouds are forming in the neighbourhood of each other, and joining the forces preparatory to the tempest, general confusion takes place in the atmosphere; various and even contrary currents of air flowing promiscuously hither and thither, as is evident from the visible irregular motions of detached parts of the cloud. In this general effort of nature, to restore an equilibrium, some of the aerial currents will probably introduce air, which having been till now

at a distance from the scene of action, has suffered no material change in its natural electric state* ; and is, on the contrary, fraught with all the cold which is natural to the region of the atmosphere from whence it came. In falling through this adventitious current of air, the drops of rain, precipitating from the body of clouds above, are congealed into ice, and descend in hail, which, as it falls, collects other snowy or icy particles round it ; a hail-stone, when it comes to the ground, resembling dense snow with a nucleus or kernel of solid ice in the middle.

That the air, which this hail-stone falls through, is colder than the region from whence it descends, may be thus proved, viz. If the freezing took place, where, and as soon as, the vapours were first set at liberty by a flash of lightning, it would be impossible for them ever to unite into drops, but they must descend in the finest crystals, an assemblage of which constitutes a flake of snow ; the nucleus, or proper hail-stone, must then have been first a fluid drop, and afterwards congealed in its fall through a colder region than that in which it was formed.

It may be further objected, that a thunder cloud, in the eastern parts of America, always makes its first appearance in the west, over the land, its progress being towards the sea ; which seems to contradict the supposition in the theory, that the vapours,

of which it consists, are chiefly supplied from the sea.

To which I answer, 1. That a thunder cloud is with us very rarely—indeed scarcely ever—formed in the west, without a sea-breeze springing up previously from the east. 2. That the sea air, as observed before, always abounds with vapours, although, from the causes already assigned, they are usually, at their first rising, invisible. 3. That the first appearance of a cloud will always be where the vapours are first collected into a body and condensed, and thereby rendered visible, which, in a thunder cloud, will be in the west, notwithstanding the vapours, of which it consists, may chiefly have arisen from the sea. 4. That when a thunder cloud is once formed, it will be in a state of attraction with the earth in general, and more especially so with all substances which are natural conductors of the electric fluid, such as the water contained in rivers, bays, arms of the sea, &c. and by these the course of a thunder cloud is known to be very sensibly affected.

But the ocean is the grand object towards which its course will be directed ; accordingly, the progress of the clouds is from the western horizon, eastward, be the weather below what it may, not excepting the most violent easterly storms, which are sometimes, though but rarely, accompanied with thunder and lightning.

To the foregoing observations I would add, 5. That when an extensive thunder cloud is forming in the atmosphere, by means of the mutual attraction of the condensing vapours, and the body of electrified air, which sustains and condenses them, the increasing density of the whole compound mass of air and vapour will, by degrees, occasion its re-descent towards the earth, from the law of gravity : it will also be attracted by,

NOTE.

* This supposition will be justified by considering, that such is frequently the state of the atmosphere, that the thunder clouds, which are formed in it, are but of small extent : notwithstanding which, the change in the state of the air, occasioned by them, is perceived to the distance of many leagues round.

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and move towards the ocean, upon the principles of electricity; the cloud will then descend obliquely, in a diagonal between the directions of these two powers; and both, continually acting upon it, will jointly accelerate its motion. Such a cloud, if dense and large, would end in a perfect tornado, either upon the land or water, as thunder showers frequently do; smaller clouds being also usually accompanied with gusts or flurries of wind.

I shall here add one observation more, which I have frequently made, and which may tend to confirm the foregoing theory, viz. That, as the general course of the eastern coast of North America, is from north-east to south west; the course of a thunder cloud is usually from the north-west, with the wind at south-east, perpendicular to the direction of the coast, and contrary to each other.

Inland seas and great lakes, such as are those in North America, may answer the same purposes, in the interior parts of the country, as the ocean does near the limits of the continent, both by affording the necessary supplies of vapours for the formation of the clouds, and by their attractive influence upon those clouds, when formed.

I now conclude with a few hints, which I shall throw into the form of queries.

1. Whatever the primary cause of evaporation may be, does not the formation of vapours into distinct clouds depend upon the electrical state of the atmosphere?

2. Were the atmosphere always uniformly electrical, could we have any rain*? in that case, if evapora-

tion be performed independent of electricity, should we not be enveloped in everlasting fogs?

3. Mr. Canton supposes that "the *aurora borealis* may be the flashing of electric fire from positive towards negative clouds, throughout the upper part of the atmosphere." But as the air is usually charged more or less with vapours, even when perfectly pellucid—and as the most remarkable *aurorae* frequently appear without a cloud in the hemisphere, may not this phenomenon be rather occasioned by the "flashing of electric fire," from one region or body of air to another, in a different state of electricity, through the intervening vapours?

4. May not the reason of its usual appearance in the north, and of its flashing southward, be, that, in every northern latitude, the air to the southward is, at all seasons of the year, *cæteris paribus*, more affected by the heat of the sun than the air northward of the same latitude? and does not this occasion an electrical current to flow from north to south, as often as the above-mentioned circumstances concur, though with some interruption from the irregular disposition of the conducting vapours? and may not this occasion those gleams and streams with which this phenomenon is usually attended?



Address to the minority of the convention of Pennsylvania.

(Continued from page 168.)

NUMBER II.

Gentlemen,

THE principal object of my last paper was to point out a variety of instances, in which the agency and powers of the state government are absolutely necessary to the existence of civil society, and to the execution of the federal constitution itself. I therein particularized certain

NOTE.

* Signor Beccaria concludes from experiments, that gentle rains are the effects of a moderate, as thunder showers are of a more plentiful, electricity.

important matters necessary to be done from time to time, which cannot be attempted or performed by the general government. Here, then, we find, not only that the state powers will not be annihilated, but that they are so requisite to our system, that they cannot be dispensed with.

Having seen what congress cannot do, let us now proceed to examine what the state governments must or may do.

First, then, each state can appoint every officer of its own militia, and can train the same, by which it will be sure of a powerful military support, attached to, and even part of itself, wherein no citizen of any other state can be a private sentinel, much less have influence or command.

2dly. Every regulation relating to religion, or the property of religious bodies, must be made by the state governments, since no powers, affecting those points, are contained in the constitution.

3dly. The state legislatures and constitutions must determine the qualifications of the electors for both branches of the federal government; and here let us remember to adhere firmly, within our respective commonwealths, to genuine republican principles. Wisdom, on this point, which lies entirely in our hands, will pervade the whole system, and will be a never-failing antidote to aristocracy, obligarchy, and monarchy.

4thly. Regulating the law of descents, and forbidding the entail of landed estates, are exclusively in the power of the state legislatures. A perfect equality, at least among the males, and possibly among the females, should be established, not only in the strict line of descent, but in the most remote collateral branches. If a man omits to make a will, the public should distribute his property equally among those who have equal pretensions, and who are able

to render equal services to the community. By these means, poverty and extreme riches would be avoided, and a republican spirit would be given to our laws, not only without a violation of private rights, but consistently with the principles of justice and sound policy. This power, with that mentioned under the last head, if exercised with wisdom and virtue, will preserve the freedom of the states beyond any other means.

5thly. The elections of the president, vice-president, senators, and representatives, are exclusively in the hands of the states, even as to filling vacancies. The smallest interference of congress is not permitted, either in prescribing the qualifications of electors, or in determining what persons may or may not be elected. The clause, which enables the federal legislature to make regulations on this head, permits them only to say at what time in the two years, the house of representatives shall be chosen; at what time in the six years, the senate shall be chosen; and at what time in the four years, the president shall be elected; but these elections, by other provisions in the constitution, must take place every two, four and six years, as is declared in the several cases respectively.

6thly. The states will elect, appoint, and commission all their own officers, without any possible interference of the federal government.

7thly. The states can alter and amend their several constitutions, provided they do not make them aristocratical, oligarchic, or monarchical—for the federal constitution restrains them from any alterations that are not really republican. That is, the sovereignty of the people is never to be diminished or destroyed.

8thly. The states have the power to erect corporations for literary, religious, commercial, or other pur-

poses, which the federal government cannot prevent.

9thly. Every state can always give its dissent to federal bills, as each has a vote in the senate and house of representatives, secured by the constitution. Hence it appears, that the state governments are not only intended to remain in force within their respective jurisdictions, but they are always to be known to, and have their voices, as states, in, the federal councils.

10thly. The states are not only to elect all their own officers, but they have a check, by their delegates to the senate, on the appointment of all federal officers.

11thly. The states are to hold separate territorial rights; and the domestic jurisdiction thereof, exclusively of any interference of the federal government.

12thly. The states will regulate and administer the criminal law, independently of congress, so far as it regards *mala in se*, or real crimes; such as murder, robbery, &c. They will also have a certain and large part of the jurisdiction, with respect to *mala prohibita*, or matters which are forbidden, from political considerations, though not in themselves immoral; such as unlicensed public houses, nuisances, and many other things of the like nature.

13thly. The states are to determine all the innumerable disputes about property, lying within their respective territories, between their own citizens, such as titles and boundaries of lands, debts by assumption, note, bond, or account, mercantile contracts, &c. none of which can ever be cognizable by any department of the federal government.

14thly. The several states can create corporations, civil and religious; prohibit or impose duties on the importation of slaves into their own ports; establish seminaries of

learning; erect boroughs, cities, and counties; establish and promote manufactures; open roads; clear rivers; cut canals; regulate descents and marriages; license taverns; alter the criminal law; constitute new courts and offices; establish ferries; erect public buildings; sell, lease, and appropriate the proceeds and rents of their lands, and of every other species of state property; establish poor-houses, hospitals, and houses of employment; regulate the police, and many other things, of the utmost importance to the happiness of their respective citizens. In short, besides the particulars enumerated, every thing of a domestic nature must or can be done by them.

In addition to this enumeration of the powers and duties of the state governments, we shall find many other instances under the constitution, which require or imply the existence or continuance of the sovereignty and fealty of the states. The following are some of them:—

All process against criminals, and many other law proceedings will be brought by, and run in the name of, that commonwealth, in which the offence or event shall have taken place.

The senate will be representatives of the several state sovereignties.

Every state must send its own citizens to the senate and to the house of representatives. No man can go thither, but from the state, of which he is a complete citizen, and to which, if they choose, he shall be sworn to be faithful.

No state shall, on any pretence, be without an equal voice in the senate, and a vote in the house of representatives.

Any state may repel invasions, or commence a war under emergent circumstances, without waiting for the consent of congress.

The electors of the president and

president must not nominate more than one person of the state to which they respectively belong: so useful is the federal constitution to serve the rights of the states.

In case of an equality of votes in election of the president or vice-president, a casting voice is given to the states, from a due attention to their sovereignty, in appointing the sensible head of the federal government.

The president of the united states require written communications from the governors of the states.

Provision is made for adjusting differences between two states—or a state and the citizens of another. Two states may be admitted into the union. As all the territory of each is already in the union, it is clear that any district is expected to stand on different ground, when erected into a state, from what it did when it composed a number of counties, or a part of an already existing member of the confederacy.

Two states may not become one, without the consent of congress; which proves clearly that the constitution held the severalty of the states necessary. This is directly opposite to your idea, that consolidation was intended. Each state and the federal judiciary are to give faith and credit to the records and proceedings of every other state.

The states have, in the federal constitution, a guarantee of separate republican forms of government.

Two thirds of the states in the proposed confederacy can call a convention; not two thirds of the people. Three fourths of those states can alter the constitution; not three fourths of the people.

From this examination of the proposed constitution for the united states, I trust it will appear, that, though there are some parts of it, which, taken separately, look a lit-

tle like consolidation, yet there are very many others, of a nature which proves, that no such thing was intended, and that it cannot ever take place.

It is but since the middle of the present century, that the principles and practice of free governments have been well understood; political science having been much slower in its progress than any other branch. Perhaps this has been caused by the greater degree of passion, to which, from its nature, this department of knowledge is subjected. The principles, on which free sovereignties ought to confederate, is quite a new question, and a new case. It is difficult, therefore, to take it up at once in the proper way. One circumstance has exceedingly obscured the subject, and hid the truth from the eyes of many of us. Most of the states being in the possession of free governments, some have looked for the same forms in a confederating instrument, which they have justly esteemed in their several social compacts. Recommending this distinction as necessary to be taken home to your minds, when you examine the great subject before you, I shall cease for the present to trespass on your time.

A Freeman.



A view of the principles, operation, and probable effects of the funding system of Pennsylvania—together with some observations on the effects of a sinking fund—tending to shew, that this state, by a proper application of her present resources, may redeem the whole capital of her funded debt in a few years.

“Public credit is public wealth.”

(Continued from page 182.)

OUR means are not less, in proportion to our debt, than those of Great Britain were at the time al-

taded to, and our advantages in the use of them may be, in many respects, greater; when our federal government shall be properly organized, which it is the wish and the hope of every patriot may speedily happen, these means and these advantages may be put in proper operation by the united states. In the mean time, a cursory review and examination of the principles, operation, and present situation of the funding system established in Pennsylvania, may convey information, not less pleasing than useful, to many of the citizens, and may possibly suggest hints which may be improved to public advantage.

The citizens of Pennsylvania had become, during the war, larger creditors of the united states, than the citizens of any other state, especially in that part of the public debt which was contracted by loans. The cessation of the payment of interest in bills of exchange, according to the original contract, on which a considerable part of these loans was made, was therefore more deeply affecting and alarming to them than to others. They addressed congress by remonstrance and petition, stating in pathetic terms the wretchedness of the situation to which they were reduced, and imploring relief; but the paramount necessities, created by the pressure of the war, occasioned a temporary suspension of the operations of justice to individuals, and left them without hope of speedy relief from that quarter. They then applied to the legislature of the state, suggesting the reasonableness and propriety of liquidating, on the whole, a burden which every one with ease could bear a proportionate part of, though oppressive to the individuals on whom it partially rested. On this application, the legislature were pleased to make provision for the payment of one year's interest, as a temporary relief; and afterwards to

make further provision for the payment of the interest annually, until congress should be enabled to make permanent provision for discharging or funding the whole of the public debts contracted during the war.

By an act passed the 16th March, 1785, the legislature, in order to make provision for the payment of this interest, as well as certain other payments therein mentioned, appropriated certain revenue to form a fund, viz.

I. The produce of the duties on goods imported from and after the 1st of November, 1784, estimated at the annual sum of

£75,000 0

II. The produce of an annual tax, put in operation by virtue of this act, being the annual quota required of this state, in aid of the duties on goods imported, for the purpose of paying the annual interest of the national debt, according to the recommendation of congress, of the 18th of April, 1783, and agreed to by the assembly of this state, by their act of Sept. 23, 1783,

76,945 17

£. 151,945 17

III. £. 100,000 of the bills of credit to be emitted.

IV. All the arrearages of taxes due on acts passed since the 1st of January, 1732; which arrearages were supposed to be about £. 400,000.

On this fund, the following annual payments were charged by the same act:

I. To the continental loan-officer, the estimated quota of this state of the annual interest of the aggregate debt of the united states; for the purpose of paying, first, the interest and arrears of interest on such continental certificates as therein described; and secondly, such other interest as the united states should pay, - - -	£. 123,932 0 0
II. The annual interest of the state debt, which, it was supposed, would require, - - -	15,000 0 0
III. To the late proprietaries annual- for $7\frac{2}{3}$ years (one year's instalment having been otherwise provided for,) - - -	25,000 0 0
IV. For sinking the above-mentioned bills of credit, to commence in the year 1786, annually, - - -	20,000 0 0
	<hr/>
	£. 183,932 0 0

It was supposed that the bills of credit and the arrearages of taxes would enable the fund to support these annual payments till the proprietary debt should be discharged and the bills of credit redeemed, after which the fund would be disburdened of 45,000*l.* per annum.

These revenues were so calculated, in conformity with the system recommended by congress, on the 18th of April 1783, as to enable the state

to be in constant readiness to conform to that system on her part, whenever it should be acceded to by the other states. And provision was made in the act, for conforming to the regulations of congress, whenever they should be enabled to make adequate and permanent provision for paying or funding the whole debt.

Thus stood the state-system of funding, till the requisition of congress, of September, 1785, made some alterations necessary, in order to avoid interfering with continental regulations.

By an act, passed in March, 1786, for complying with the requisition of September 1785, so much of the funding act, as directed the payment of 123,932*l.* annually to the continental loan-officer, was repealed.

And by another act, passed in the same month, the holders of such continental certificates, as were entitled to draw interest out of the state fund, were authorized to deliver them to the comptroller general, as loans to the state, and thereupon to receive state certificates, of equal liquidated value, which would be entitled to draw interest half-yearly at the state treasury; by which means, the creditors would receive their interest with as much punctuality as before, and the state negotiate and pay its quota of the indents issued by the united states, without putting them into circulation. These alterations, however, brought an additional charge on the fund for that year, though they somewhat reduced the annual charge upon it afterwards: for, in order to comply with the requisition of September, 1785, it was requisite, besides discounts for interest already paid by the state, to advance 125,318 dollars to the united states, in specie, which sum was charged upon and paid out of this fund.

This was the situation of the fund-

ing system, after the alterations made by the act passed in March, 1786; and except the addition of some certificates, admitted by a later act into the new loan, which were not admissible under the original act, it has undergone no legislative alteration since. Let us now take a view of its operation and present condition. But in order to do this, it must be disentangled from all other matters, and an account stated of the transactions under it, separate and distinct from the other business of the treasury. It is much to be regretted, that the accounts of the transactions under this system, have not been kept, and annually stated to the public, in this manner; and it is to be hoped that in future they will be so ordered. In the mean time, the following estimates may serve to shew how the system has operated hitherto, and afford a pretty just view of its present situation and circumstances, though they may not be perfectly accurate. No notice is taken, in any of these estimates, of the support of government, the redemption of depreciation certificates, former emissions of bills of credit, and some other state engagements: because other funds are appropriated to those purposes, which either are or ought to be made adequate to them.

An account of the actual receipts and payments, under the funding system of Pennsylvania, from March, 1785, to the first of November, 1787, as nearly as the same can be collected from the statements of the comptroller general.

RECEIPTS.

Bills of credit put into the treasury to be emitted as cash, £. 100,000 0 0

Impost duties for three years, from the

1st. of Nov. 1784 to the 1st of Nov. 1787,	—say,	190,000 0
Taxes, and arrears of taxes, collected from March, 1785, to December, 1786,		148,500 0
Ditto, from thence to the 1st Nov. 1787,		124,667 0
		<hr/> £. 563,167 0

PAYMENTS.

One year's interest paid in 1785, through the hands of the continental loan-officer, 248,446. 84 dollars, equal to £. 93,267 12

Paid to the united states, to complete the specie payment directed by the act of March 1786, 125,318 dollars, 46,995 5

Two years' interest paid by the state-treasurer on new loan certificates, 228,103 15

Four years' interest paid on the original state debt, 40,469 5

Bills of credit cancelled, 40,000 0

£. 448,735 18

Balance in stock, £. 114,431 1

Whatever the true balance may be, it is not supposed that the whole actually in the treasury. Twenty thirty thousand pounds of the debt may be yet outstanding; but whatever this amount may be, it will come in hereafter. The residue however, (excepting such part payments as may have been made, pursuant to the system) is either in the treasury, or has been b

owed from this fund, and applied to other uses. Whatever has been borrowed, is to be replaced out of other funds.—28,489 dollars of his money appears, by the comp-roller-general's statement, to have been paid to the united states, since completing the payment, directed by the above mentioned act, of March 1786, and therefore is not chargeable on this fund.

It will be observed, that, in the above account, no charge is made of any payment to the late proprietaries. They have received none out of this fund; the first instalment, which was otherwise provided for, being not yet all paid. The probable reason is, that they have declined making farther payments on account of the present state of the bills of credit; and they have a right to let their demand lie on interest, until they shall be offered payment in specie. But it may also be observed, that the surplus of the fund is more than equal to the payment of the three instalments, which became due to the late proprietaries, at and before September, 1787, after doing more than the ordinary performance of its other functions; for, in less than two years and a half, from its establishment, it hath paid three years' interest, on that part of the debt, called the new loan, and four years' interest on the original state debt, besides advancing the extra sum charged upon it, for the united states, and sinking forty thousand pounds of the bills of credit.

The following estimate will shew, that the annual produce of this fund is more than equal to the annual charges upon it.

Estimate of the receipts and payments under the funding system for the ensuing year, that is, from the 1st of November 1787, to the 1st of November 1788.

RECEIPTS.

Balance brought forward from last year,	-	£. 114,431	19
Impost duties will probably produce	-	60,000	00
Annual tax,	-	76,945	17 0
Arrears of taxes (there now remain £. 324,000 after a deduction of £. 30,000 for exonerations,) suppose a collection this year, of		50,000	00
		£. 301,376	19 3

The annual payments, directed by law, are:

One year's interest on the funded debt, including new loan and original state certificates,	- - -	£. 124,706	00
One year's instalment to the late proprietaries,	- - - -	25,000	00
For cancelling bills of credit,	- - -	20,000	00
		169,706	00

Balance to be carried to next year, £. 131,670 19 3

Which is £. 17,239 17 6 more than the balance brought forward from last year.

It is to be remembered, however, that three years' instalments, due to the late proprietaries, amounting to £. 75,000, besides interest, remain chargeable on this balance.

Thus it appears, that the revenues appropriated to this fund, com-

puting £.50,000, a year, to be collected out of the arrears of taxes, amount to £. 186,945 17 6 per annum; and the annual payments, charged upon the fund, amount to £. 169,706, which affords an annual surplus of upwards of £. 17,000, towards paying the arrearages of interest, or to be applied to the sinking fund.

But that part of the revenue, which arises from the arrearages of taxes, must cease in a few years, that is, when the £.324,000, now remaining out, shall have been exhausted. Before that happens, however, the fund will probably be relieved from the payment of £. 45,000 per annum, by the final discharge of the proprietary debt, and the extinction of the bills of credit. Or, if any part of these should remain undischarged, the surplus or sinking fund will be proportionably richer: because the whole sum, requisite to complete these objects, is far short of the amount of the taxes in arrear, after deducting £.30,000 for exonerations of some of the frontier inhabitants who were driven from their habitations by the savages. Let us then suppose the arrearages of taxes exhausted, and the fund exonerated from these payments of £. 45,000 per annum. The estimate will then stand thus:

The current tax and duties produce per annum,	- -	£.136,945 0 0
Annual interest of the funded debt,	-	124,706 0 0
Annual surplus for the sinking fund,	—————	£. 12,239 0 0

It may be observed, that, in all the foregoing estimates, the annual interest has been computed on the whole amount of the certificates, issued and expected to be issued, chargeable on this fund, which remained unre-

deemed on the 1st of November last and this is certainly the proper mode of estimating, in order to allow due operation and effect to a sinking fund. But this capital is rated above the sum that actually draws interest from the treasury, even at the present time for, of the original state debt, included in the estimate, certificates to the amount of £.58,000, have not yet been issued, and a great part of them probably never will be. Of the certificates, which have been issued, there had been redeemed before the 1st of November, 1787, to the amount of £.22,554, of the original state debt and £.57,705, of the new loan. And when we consider the continual flow of these certificates into the land office, by new sales of land, and the payment for old purchases at locations, we may fairly count upon a constant and considerable increase of the powers of the sinking fund, especially as the amount, yet remaining out, of the unfunded certificates receivable in the land office, is so small, that those which come in hereafter must be chiefly of the certificates charged upon the fund.

It may not be improper to remark, that an annual surplus of revenues, equal to one per centum, on any capital, funded at an interest of six per centum, would of itself be sufficient to discharge the whole capital in a little more than thirty years. The surplus, already formed if it were not for some arrears of interest yet due, would be little short of this amount; and when we consider the probable increase of it, by the means above mentioned, we may indulge a hope, that this funded debt, enormous as it may now appear, may be honourably discharged, by the means now in operation, in the course of twenty years, or perhaps in less time, if every advantage be fairly improved. This calculation, of the power of a sinking fund, is

made on a supposition, that the annual surplus of revenues, with its accumulating increase, is to be laid out in the purchase of capital, at full value. It is evident, that in this case such purchases may be made, at least for some time to come, on terms more advantageous to the public, and, of course, the debt may be reduced proportionably faster. And however dishonourable it may be to a state or nation, to sacrifice the property of its creditors, by neglecting to make provision for discharging its engagements, it can reflect no dishonour on a state, which fairly funds its debts, and punctually pays the interest, to purchase the principal at market price.

But, in order to effect this desirable purpose, a strict adherence to system, and a sacred regard to appropriations, are highly necessary, as well in the executive, as the legislative department. If the legislature would regularly and uniformly assign funds for every expenditure they authorise to be made, and oblige their officers so to form and keep their accounts, as to shew that every disbursement was paid out of, and fairly charged upon the fund assigned for the purpose, it would not only produce regularity and order in the business of the treasury, but tend much to promote economy in public affairs. They would better understand the state of their affairs, and more readily perceive the probable effect of their own measures, and one assembly would be less likely to roll upon another the burden of providing for the payment of debts, which they have contracted. A legislature, which uniformly devises and establishes the means of defraying every expense it authorizes to be incurred, may be said to pay as it goes, and will never want credit on sudden and extraordinary occasions, which may require engagements to be made, before the means of

payment are established. But on all such occasions, it is necessary to the preservation of public credit, to provide for the performance of past engagements, before new ones are contracted. And a legislative appropriation of a fund or branch of revenue, for the payment of a debt, or the performance of a contract, ought to be as sacredly observed and adhered to, as the mortgage of an estate by an individual.

The writer of these observations hopes he shall be pardoned for this digression. It is far from his intention to give offence, or to meddle improperly with the business of others; but he conceives it to be, in some measure, the duty as well as the right of every citizen of a commonwealth to contribute his mite to the general welfare; and he is not without hopes, that the observations now offered, may be improved to public advantage.

If this representation of the principles, operation, and effects of the funding system of Pennsylvania, be as just as the writer really believes it to be, it may tend to remove some prejudices against it, which want of information may have permitted to arise. There is an objection, however, which hath been raised against it, and which may require more particular notice: It has been said, that the state has assumed more than its proportion of the general debt of the united states.

It will be remembered, that at the time this system was formed, the aggregate debt of the united states was estimated at something more than forty-two millions of dollars;—that the quota of Pennsylvania, as it was computed at that time, and has been ever since, was little less than one seventh part, and amounted, by that rule of computation, to something more than 5,745,000 dollars. The new loan (including 80,000 dol-

lars which may yet come in) amounted, on the 1st November 1787, to 5,148,994 dollars; part of which having been redeemed, the balance then remaining, on which the state pays interest, was 4,997,779 dollars and 58 ninetieths;—a sum considerably below the estimated quota of this state, of the whole debt, and but very little more, than such quota of the domestic part of it, according to the estimate, published by congress in 1783. That it has in any degree exceeded our proportion of the domestic part of the debt, has been owing to the citizens of Pennsylvania being original creditors in a greater proportion than others; for none, but certificates originally issued to citizens of Pennsylvania, or paid to them from the public, for supplies, were authorized to be admitted into the loan; and if by possibility a few have unavoidably crept in, which were not fairly entitled, they have probably been but very few, and can bear but a small proportion to those which were excluded, by having been alienated from the original holders, before the act took place. In a business of so great magnitude, and involved in circumstances not easy to be investigated, it was hardly to be expected, that general rules could be formed, less liable to exceptions, than those by which the admissions to this loan have been governed. If the state had, by these rules, assumed something more than her proportion of the whole, it would have been but an equitable liquidation of a burden, which ought to be borne by the state, rather than by individuals of her citizens. And if the state may ultimately derive benefit, as well as honour, from the measures by which she has obtained these, and other continental certificates, by being enabled to perform her federal duties with the more ease and facility, these measures may be considered as acts

of good policy, as well as of justice. In order to shew, that this may probably be the case, it may be proper to take a view of the situation in which the state will be placed, when the impost revenues shall be transferred to the united states.

Great expectations are formed of the order, regularity, and punctuality, which will take place on the adoption of the new plan of government. Let us suppose these pleasing expectations realized. The state will then relinquish her separate claim to the impost duties, now estimated at £.60,000 per annum, but she may keep possession of all her other branches of revenue, if she can meet and discharge at the threshold her quota of the demands of the united states. The impost system will probably yield to the federal treasury, revenues sufficient to fund the foreign debt, support the civil government, and other establishments, and do something considerable towards paying the interest of the domestic debt. Our quota of what may be farther requisite, may be somewhere between one and two hundred thousand dollars. Besides the certificates obtained by the new loan, the state has acquired by other means, certificates to the amount of near one million of dollars; so that she is possessed of continental certificates which entitle her to demand interest from the united states to the amount of 371,782 dollars per annum.—The greater part of these belong to the funding system: whether the rest be added to it or not, the state may join them in her claims upon the union; and the following estimate may shew the benefit to be derived from having this in her power, and that the funding system may continue uninjured.

Annual interest
due from the united
states 371,782 dol-

ars, equal to £. 139,418 5 0
 Annual tax, - - 76,945 17 6
 Arrearages of tax-
 s £. 324,000. Let us
 suppose they produce
 annually, till the pro-
 prietary debt shall be
 discharged, and the
 bills of credit re-
 deemed, - - 45,000 0 0

£. 261,364 2 6

Charged thereon.

Annual interest of
 the funded debt, - 124,706 0 0
 Annual payment
 of the late proprie-
 taries, 25,000 0 0
 Annual redempti-
 on of bills of credit, 20,000 0 0
 Annual reserve for
 sinking fund, - 20,000 0 0

£. 189,706 0 0

Surplus, out of
 which the requisi-
 tions of the united
 states for the pay-
 ment of interest, may
 be discharged, - £. 71,658 2 6

Thus it appears, that the state of
 Pennsylvania hath obtained a situa-
 tion, in matters of finance, more eli-
 gible, circumstances considered, than
 could reasonably have been expected,
 and probably much better than many
 of her citizens at this moment apprehend.
 Her disbursements, under the
 funding system, do not impoverish,
 but rather enrich the state. They
 are distributed among her own citi-
 zens, and, by enlivening the circula-
 tion of money, they promote indus-
 try, and facilitate the collection of
 taxes and duties. The internal tax,
 which scarcely exceeds eight shillings
 on every hundred pounds, on a mode-
 rate valuation of estates, is light, when
 compared with the object. What
 patriot will murmur at the payment

of such a tax, when he considers that
 it is to support a system, which bids
 fair, in a few years, to revive and es-
 tablish the public credit of the state,
 discharge her proportion of the pub-
 lic debt, and do justice to her virtuous
 citizens, whose zeal in the common
 cause of their country, induced them
 to advance their property for the pub-
 lic service, in times of difficulty and
 distress—in times when many who
 are now at ease, would have thought
 it a happy compromise, if they could
 have purchased, with a moiety of
 their property, the peace, liberty,
 and safety which now court their
 culture and enjoyment?

Let us attend to the language of
 congress, in their address to the sever-
 al states accompanying the recom-
 mendation of the 18th of April 1783,
 whereby they demanded this tax for
 twenty-five years, to the precise a-
 mount, and for the very purpose, to
 which it is now appropriated, with
 this circumstantial difference only, in
 the mode of application, that what is
 raised in the state, is now paid to her
 own citizens; whereas if it had gone
 first into the general treasury, a
 small proportion only might have
 come back to our citizens; the rest
 would probably have been thought
 necessary to supply the deficiencies
 of other states.

“ The plan, thus communicated
 “ and explained by congress, must
 “ now receive its fate from their
 “ constituents. All the objects com-
 “ prised in it, are conceived to be of
 “ great importance to the happiness
 “ of this confederated republic; are
 “ necessary to render the fruits of the
 “ revolution a full reward for the
 “ blood, the toils, the cares, and the
 “ calamities which have purchased
 “ it. But the object, of which the
 “ necessity will be peculiarly felt, and
 “ which it is peculiarly the duty of
 “ congress to inculcate, is the provi-
 “ sion recommended for the national

“ debt. Although this debt is greater
 “ than could have been wished, it is
 “ still less, on the whole, than could
 “ have been expected; and when re-
 “ ferred to the cause in which it has
 “ been incurred, and compared with
 “ the burden, which wars of ambition
 “ and of vain glory have entailed on
 “ other nations, ought to be borne,
 “ not only with cheerfulness, but with
 “ pride. But the magnitude of the
 “ debt makes no part of the question.
 “ It is sufficient, that the debt has
 “ been fairly contracted, and that
 “ justice and good faith demand that
 “ it should be fully discharged. Con-
 “ gress had no option, but between
 “ different modes of discharging it.
 “ The same option is the only one
 “ that can exist with the states. The
 “ mode which has, after long and
 “ elaborate discussion, been preferred,
 “ is, we are persuaded, the least ob-
 “ jectionable of any that could have
 “ been equal to the purpose. Under
 “ this persuasion, we call upon the
 “ justice and plighted faith of the
 “ several states, to give it its proper
 “ effect, to reflect on the consequences
 “ of rejecting it, and to remember
 “ that congress will not be answer-
 “ able for them.

“ If other motives, than that of
 “ justice, could be requisite on this
 “ occasion, no nation could ever feel
 “ stronger: for to whom are the
 “ debts to be paid?

“ To an ally in the first place,
 “ who to the exertion of his arms in
 “ support of our cause, has added
 “ the succours of his treasure; who,
 “ to his important loans, has added
 “ liberal donations; and whose loans
 “ themselves carry the impressions of
 “ his magnanimity and friendship.
 “ To individuals in a foreign
 “ country, in the next place, who
 “ were the first to give so precious a
 “ token of their confidence in our
 “ justice, and of their friendship for

“ our cause, and who are membe
 “ of a republic which was second i
 “ espousing our rank among nation
 “ Another class of creditors is th
 “ distinguished and patriotic bar
 “ of fellow citizens, whose bloc
 “ and whose bravery have defende
 “ the liberties of their country; wh
 “ have patiently borne, among oth
 “ distresses, the privation of the
 “ stipends, while the distresses
 “ their country disabled it from b
 “ flowing them; and who, eve
 “ now, ask for no more than such
 “ portion of their dues as will en
 “ ble them to retire from the field
 “ victory and glory into the bosom
 “ of peace and private citizenshi
 “ and for such effectual security fo
 “ the residue of their claims as the
 “ country is now unquestionably
 “ ble to provide.

“ The remaining class of cred
 “ tors is composed partly of such
 “ our fellow citizens as original
 “ lent to the public the use of the
 “ funds, or have since manifeste
 “ most confidence in their country
 “ by receiving transfers from the lei
 “ ders, and partly of those who
 “ property has been either advance
 “ or assumed for the public service
 “ To discriminate the merits of the
 “ several descriptions of creditors
 “ would be a task equally unnecessa
 “ ry and invidious. If the voice
 “ humanity plead more loudly in fa
 “ vour of some than of others, th
 “ voice of policy, no less than o
 “ justice, pleads in favour of all.
 “ A wise nation will never permi
 “ those who relieve the wants o
 “ their country, or who rely most o
 “ its faith, its firmness and resources
 “ when either of them is distrusted
 “ to suffer by the event.”

THE writer of the foregoing
 pamphlet has found, on farther
 investigation, that some error
 were committed in stating the ac

ount of actual receipts and payments under the funding system from March 1785, to the 1st of November 1787, owing chiefly to the imperfect state of the documents from which he drew his information at the time of writing. As truth was the object of his enquiry, and fair and candid information to his fellow citizens, his intention in publishing the result, similar motives induce him now to offer the following corrections and observations.

The produce of the duties on goods imported from the 1st of November 1784, to the 1st of November 1787, was estimated in the account alluded to, at £.190,000. This estimate was formed on the best information he could obtain at the time, and was intended to be stated either below than above the true sum. But the accounts relative to these duties, had not then been so stated as to shew the net produce of the duties appropriated to this system, after deducting drawbacks, office expenses, and such duties as have been created by subsequent acts of the legislature, and which yet remain inappropriated. This last article, amounting to near £.40,000, occasions a much larger deduction than was apprehended, and of course leaves less of the aggregate amount for the funding system than was supposed. But on the other hand, it appears by a report of the comptroller general, lately exhibited to the committee of ways and means, that the other revenues appropriated to the system, have produced more money to the treasury within the time mentioned, and that the payments chargeable thereon, have been less than are stated in the said account. So that on the whole, the balance in favour of the system on the 1st of November 1787, as a provision towards making the payments charged upon it, will not be less than the balance stated in the said

pamphlet, [see page 148] notwithstanding this great deficiency in the amount of the appropriated duties. In another respect, however, this deficiency will have an injurious, though not a fatal effect on the operations of the system. The annual produce of the appropriated duties for the current and future years has been estimated at £.60,000. The year 1786 produced less than £.40,000. The year 1787 something more than £.42,000. So that although it is again rising, it may fall fifteen or £.20,000 short of the estimate. In such case the arrearages of interest due to the public creditors, may not be so speedily paid, nor the sinking fund so briskly operative as might be expected, if this source of revenue were more productive. But if the taxes are collected with decent punctuality, or even as well as they have been collected hitherto, the appropriated revenues may still keep pace with the current payments charged upon them; and the reduction of the capital of the debt by receipts in the land-office, will soon create a sinking fund, that, if faithfully managed, may discharge the whole debt in twenty years, or probably in less time.

In the comptroller general's late report, in which he states, but £.109,726 17 10 to have been actually received for duties appropriated to the funding system within the three years from the 1st of November 1784, to the 1st of November 1787, he shews that the receipts on account of that system have nevertheless exceeded the payments £.61,162 2 9. Of the appropriated duties which arose within that time, about £.25,000 had not been actually received on the 1st of November, and are therefore left out of the comptroller general's account; but as they arose within the time, and have been since received, or shortly

will be, they ought to be added to the estimate. There is also charged to the account of this system 86,658 dollars, of the payments made to the united states, beyond what the legislature have directed to be charged. If these two sums be added to the balance stated by the comptroller general in favour of the system on the 1st of November last, it will shew that this fund had a balance in stock on that day, of about £.118,000, all of which had been actually received in the treasury, except the £.25,000 then due for duties, the greater part of which has been since received. Out of this balance, however, three instalments due to the late proprietaries, amounting to £.75,000, together with some interest, remain to be paid.



Speech of an Indian.

UPON the return of Cornplanter, an Indian chief, to his nation, in the year 1786, he praised the blessings of civil government, and proposed to his countrymen to exchange their savage mode of life, for the pleasures of civil society, and offered a plan of government for that purpose. Whereupon Caiaashuta, another chief, arose, and addressed his countrymen in the following speech, which may be considered as an answer to all that has been, or shall be written against the proposed constitution of the united states.

Brothers,

Before it is forbidden by law to speak every thing we think, and do what we please, I shall take the liberty of bearing a testimony against the government that has been proposed to us.

I shall begin by informing you, that it will deprive us of many of our dearest natural rights. It will

prevent our fishing or hunting upon the grounds of our neighbours. It will take away from us the power of revenge (so sweet to an Indian) and transfer it to certain persons called judges and magistrates. It will prevent our taking as many wives as we choose, and changing them as often as we please. It will compel us to hoe our own corn, and cook our own victuals, both of which are employments suited only for women. It will restrain us from drinking and smoaking, by imposing heavy duties upon rum and tobacco; and thereby deprive us of two of the highest pleasures of life. It will punish certain acts which we deem essential to liberty, and a material portion of our dearest rights, with imprisonment, whipping, and death. Our young men shall no more train themselves for the delightful pursuits of war by occasional irruptions upon the American husbandmen. A formal declaration of war, agreeable to the customs of civilized nations, will be necessary to sanctify every murder if we submit to the restraints that will be imposed upon us by civil government. No more will dexterity or secrecy in stealing, entitle our warriors to praise in peace, or pre-eminence in war. The pride of our nation, like the oak that yields to the north wind, will then mingle with the dead and noisy leaves under our feet. Those hands which never felt a ligature of any kind, shall then be bound in chains. Your backs shall swell with stripes, inflicted by the hands of merciless executioners: and even Caiaashuta himself, who now addresses you, and who has so often led you to glory in war, and afterwards placed you in safety under the tree of peace, shall perhaps be the first victim to a law that shall place him upon a level with a dog, by depriving him of life, not by fire, not by a bullet, not by an arrow,

t by the ignominious punishment
the halter and the gallows. These
ry locks will then kiss, for the last
re, the passing breeze. Caiashuta's
ves shall then in vain weep at the
t of his angry judges, in hopes
obtaining his pardon : and his sons
ill be threatened with his fate, for
oly swearing they will revenge this
th. And for what shall this neck
made like the crane's ? For what
ll his body feed the birds of the
? Why only for taking a horse
of a neighbour's field, to ride on
our town, or for committing what
white men call treason, that is
osing the execution of a law of
state, which was contrary to his
ereft or inclinations.

Nor, brothers, is this all. We
st submit to yield a certain por-
a of the profits of our labour for
support of this government.
e money, exacted from us for this
pose, will be called taxes. If we
use to pay them, our horses, or
tle, or farming utensils, will be
zed by an officer, appointed for that
rpose, and sold for the amount of
em. If they bring more than is
e from us, the residue will be kept
the officer, who sells them. The
mber and salaries of the officers
government will be beyond calcu-
tion. Nineteen men will be taken
om their ploughs, and employed
ery day in the year, in an executive
uncil, in reading news-papers,
d giving away profitable offices.
en the secretary of this body, whose
ly business will be to light the fire of
e counsellors, shall receive, for this
vice, 750*l.* a year. Thus you see,
others, the dangers and oppressions
which you will expose yourselves,
adopting the most simple form of
il government, that can be offered
you. It will destroy our heaven-
orn equality of rank and property.
will furnish the means of advance-
ent to men who are noted for
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“ wisdom and virtue,” and thereby
favour their becoming the lords and
masters of their less wise and indus-
trious neighbours. Brothers, our situ-
ation is not so bad as has been repre-
sented to you, by some specious and
declamatory orators, in their speeches
at a late council fire. Our cabins
are still proof against the snow storm.
Our granaries are still filled with
corn ; and if we have not venison
enough for all the families of our
nation, the kettles of your head
men have never been empty. The
sun shines bright through yonder
cloud. The great spirit is propiti-
ous. We embrace once more the
liberty, the independence, and the
blessings of the savage life. Away
with all your forms of civil govern-
ment. They have all of them, in
their turns, enslaved the nations, that
have adopted them. Even the sim-
plest democracies have been the rich-
est savannas of slavery. Savages a-
lone have preserved their liberties.
Who ever heard of an Indian tyrant
or slave ? shew me the one, or the
other, and this tomahawk shall im-
mediately slake its thirst in his
blood.



*Extract from a memoir of the abbé
de Commerel, on the culture, use,
and advantages of the scarcity root.*

THE scarcity root is but lately
introduced into France. In
Germany, where they are much in
the use of it, they give it the name
of dick ruben, great rape, and, in
some places, dick wurzel, the great
root, and mangel wurzel, scarcity
root ; because it thrives, and furnishes
an excellent food for man and beast,
when other nutriment is scarce and
dear. This root cannot be classed
either with the turnip or carrot ;
and though, both in appearance and
H

by its seed, it resembles the beet, yet it greatly excels that root, and seems to form a species of itself. Its culture is so easy, its uses so many, and it supplies so well the place of other forage, that it deserves particular attention, and claims the preference to all other roots, used for the food of cattle. It succeeds in all sorts of ground, but best in moist light land.

This precious root is not affected by the vicissitudes of the seasons, nor has it any destructive enemy. The vine-fretter which ravages every other plant, does not touch it. It is not subject to mildew, nor does the greatest drought stop its vegetation. It does not impoverish the soil, where it grows, but rather improves and renders it fit for wheat, or any other grain, one chooses to sow in it, before winter.

In order to promote the culture of this precious root and insure success, I will point out the time and manner of sowing the seed; of transplanting and cultivating the plants; and of gathering the leaves, which are produced in constant succession, and in great abundance, and are excellent food for cattle. I will then give directions for gathering, curing, and preserving the roots, and point out the time for replanting them, in order to procure seed. I will also point out the manner of preparing the roots, for feeding and fattening large cattle, and raising calves; and then say something of the general advantages to be derived from it.

I. *The time and manner of sowing the seed of the scarcity root.*

The seed may be sown at any time, from the last of February to the middle of April, when the season will permit the ground to be prepared. It may be sown either broad-cast, or in rows at five inches apart; and should be covered, at least an inch deep, with good earth. It should be sown thin, because it is large, and

because thereby it is easier weeded and because by that means the plant becomes thrifty and vigorous. The seed is commonly sown in a garden or in a piece of good land, well prepared for the purpose.

II. *The preparation of the ground, for transplanting the roots.*

As soon as the seed is sown, becomes necessary to prepare a piece of ground, where the roots may be transplanted. It is with the roots as with all other plants. The more the ground is dunged, and the better it is prepared, the finer and larger will the roots grow, and the increase of the leaves will be more abundant. In an indifferent soil, the roots will not weigh more than four or five pounds, and the leaves cannot be gathered more than four or five times. But in a good soil, they will weigh nine or ten pounds, and the leaves may be gathered eight or nine times. In light, sandy, rich soil they grow very large; and some of them will weigh from fourteen to sixteen pounds.*

NOTE.

* Although the time for sowing the seed is from the latter end of February to the middle of April, yet it may be well to sow some seed every month, even to June; so as to have always plants fit to be transplanted to any vacant places either in the garden or in the fields. "In 1784, the flies" says the abbé, "having four times successively destroyed the turnips I had sown, I substituted in their place the scarcity roots. This was in the month of August. Nevertheless, I gathered the leaves three times; and the roots weighed from three to four pounds. On hemp and flax ground after the hemp and flax is pulled the scarcity roots may be planted, and they succeed very well. And the second crop, though of a different nature, will be worth as much as the first.

II. *The time and manner of transplanting the scarcity root.*

About the beginning of May, the ground being well turned up, either with the spade or with deep ploughing, and being well dressed and levelled, either with a rake or a harrow, it will then be time to examine this nursery. If the roots be from five to six inches long, and about the thickness of a goose quill, they should be pulled up. None of the fibres should be trimmed off, but the top of the leaves may be cut, as

commonly done with endive. Then, with a dibble, holes are made in the ground, from four and a half, to five inches deep. The holes should be in strait lines, crossing each other, at right angles, in the form of checkers, at eighteen inches distance, one from another. In each of these holes, a root is planted, so as to leave about half an inch of the root above the ground. This is a very easy, but a very essential precaution, without which the root will not thrive. In twenty-four hours, the plants take root. Any person, with a little practice, may readily plant from eighteen hundred, to two thousand in a day.

V. *The first gathering of the leaves, and culture of the roots.*

About the end of June, or the beginning of July, when the outer leaves are about a foot long, they are first gathered, breaking them off all round, close to the root; for this purpose, the thumb is pushed down in the inside, to the root of the leaf. Care must be taken, not to leave any bumps of the leaves, nor should any leaves be gathered, but such as are bent towards the earth, the heart leaves being always preserved with great care. Fresh leaves will immediately sprout, and grow more vigorously. As soon as this crop of leaves is gathered, the ground should be hoed, and the surface of the ground

newly stirred, drawn from the roots, so that every root may be one inch and an half, or two inches out of ground; so that they will appear, as if planted in a basin, of eighteen inches diameter. In light grounds, it will be sufficient to cut down the weeds, and draw up the earth from the roots. After this operation, which is essentially necessary, nothing more is requisite, but to gather in the leaves and the roots. This is the time, when the roots begin to extend and grow, in an astonishing manner.

V. *The product of the leaves,*

In good land, the leaves may be gathered every twelve or fifteen days. The abbé says, he has more than once found, that in twenty-four hours the leaves grew from twenty to thirty lines, that is, from two, to two and a half inches long, and eighteen lines, or one inch and a half broad; so that, at the second gathering, they were from twenty-eight to thirty inches long, and from twenty to twenty-two inches broad. This, he observes, will appear incredible, until experience demonstrates the truth of it.

VI. *Their use for cattle.*

Oxen, cows, and sheep, eat them greedily, thrive exceedingly, and soon fatten on them. They are given to them whole, as they come from the field. Dunghill fowls eat them, when cut into small pieces, and mixed with bran. Even horses can soon be brought to eat them, and may be kept upon them the whole summer. But then it will be necessary to chop them in pieces, with the instrument hereafter mentioned, for chopping the roots, and to mix them with chaff or cut straw. Hogs eat them also, greedily.

It is to be observed, that milch-cows, which one would wish to keep so, may, without inconvenience, be fed entirely with these leaves, from eight to fifteen days successively. Du-

ring the first days, the quantity of milk is encreased, and the cream is excellent: but if they be kept entirely upon this forage, they soon fatten astonishingly, and their milk gradually decreases. In order, therefore, to keep the cows to their milk, it will be necessary to mix grafs with the leaves, in the proportion of one part of grafs to two or three of leaves: or they may be fed with grafs once a day, or, every three days, fed one whole day on grafs. By this mean, the cows will be kept in fine order, and their milk will be excellent. When there is any appearance of rain, or bad weather, a sufficient quantity of leaves should be gathered, to last two or three days; but the heaps should be frequently turned, to prevent their heating. In planting a quantity of roots, proportioned to the number of cattle to be fed or fattened, one is sure of being supplied with a sufficient quantity of leaves, be the weather what it may, even though there should be a severe and long drought. The abbé observes, that he attempted to dry the leaves, and to use them for dry fodder, but did not find it answer.

VII. *The use of the leaves for men.*

The leaves furnish a wholesome and an agreeable nutriment for men; they are eaten like beets, but they have not the earthy taste of the beet, but rather that of the artichoke. They may be dressed different ways. When dressed like spinage, many give them the preference. The roots may be boiled and eaten in the winter. The leaves, produced by the roots in a cellar, furnish also a delicate sallad in the winter.

VIII. *The gathering of the root.*

The first coming of hard frost determines the moment for gathering in the roots. Fine weather should be improved for this precious harvest, even at the risque of beginning some days sooner, than might otherwise be

necessary. It is of importance the preservation of the root, that be stored without moisture. The day being fixed on, the roots should be pulled in the morning, and left the ground, that the sun and air may dry them. Children follow the pullers, and cut off the leaves close to the root. This may be done while they are in the ground, the evening or some days before the pulling. In the evening, the roots are gathered into heaps. If they are well aired they are then put under cover in cellar, or other dry place, out of the reach of the frost. If there be no danger of rain, they may be left on the ground all night, and carried next day to the magazine or place of deposit. When the weather will admit of their being left in the air two or three days, it is of great advantage in preserving them. They should be handled gently in loading and unloading them; for as they have a very thin skin, they are easily bruised, and then they do not keep so well.

IX. *The choice of roots to be reserved for seed.*

The time of gathering is the time for selecting roots proper for seed. The only roots proper for this, are those of a middling size, even smooth, the outside of a rose colour and inside white or marbled with red and white. These are the marks to designate those which ought to be set apart for this purpose. Those which are all white or all red, are either degenerated or real beets, the seed of which has got mixed with that of the scarcity. The roots, designed for seed, must be kept by themselves in a dry place entirely out of the reach of moisture, or frost.

X. *The time and manner of replanting the roots to bear seed.*

In the beginning of April, the roots, designed for seed, should be planted deep in the ground, at the

distance of three feet one from the other. As their tops shoot up to the height of five or six feet, it is necessary to give them supporters. There should be poles stuck in the ground a foot and a half deep, and standing about seven feet above ground. They should be interlaced with rods or boughs to form a kind of espalier; and to this espalier, the tops should be fastened, as they grow, that the wind may not break them.

XI. The gathering of the seed, and manner of preserving it.

The seed commonly ripens about the end of October. It should be gathered immediately, at the coming of the first white frost. The tops are then to be cut off, and, if the weather will permit, may be hung up to dry, against a wall or fence. If the weather is bad, they should be tied in bundles, and hung up under cover, in any airy place, until they be quite dry. The seed is then beat off, and put into bags, and so kept, like other garden seeds.

Every root will produce from ten to twelve ounces of seed.

XII. The way to prevent the roots from degenerating.

The seed of the scarcity root degenerates, like all other seeds, unless care is taken, to change the ground every year, or, at least, every two years; that is to say, by sowing on strong land, what was raised on light sandy land; and on a light soil, what was raised on heavy strong ground. So that farmers, who occupy different sorts of soil, may mutually oblige each other, by exchanging their seed. The seed will keep good for three or four years.

XIII. How to preserve the roots, from November to the end of June.

If the crop be large, and cannot all be housed, then, some days before gathering, trenches should be made in the same field, or in some other place, not liable to be covered with

water in the winter. After leaving the trenches open eight or ten days, to dry, cover the bottom and sides with straw, and upon that, lay the roots, handling them gently, and taking care that they be well cleared of earth. Then cover them with straw, and upon that, lay the earth, taken out of the trench, three feet thick, beating down the earth, and forming it into a heap, highest in the middle, that the water may easily run off.

XIV. The dimensions of the trenches.

The dimensions of the trenches should be proportioned to the elevation or declivity of the ground. They may be from two to four feet deep. Their length will depend on the quantity of roots to be buried. Their width is commonly $3\frac{1}{2}$ feet. As these roots will keep without spoiling, to the end of June, it will be well to make a number of trenches, viz. one for the consumption of every month, beginning with March, the time when the winter provision, kept in the cellar, is commonly out. The reason for making several trenches is, because the roots, if exposed to the air, after they have been for a long time kept from it, are apt to spoil. This inconvenience may be prevented by multiplying the number of trenches.

XV. The necessity and manner of making air-holes.

Every trench should have an air-hole, by which the fermentation from the roots may exhale. Without this precaution, the roots, kept under ground, will spoil and rot. The manner of making air-holes is this; before any thing is put into the trench, fix, in the middle of it, a pole six or seven feet long, and two inches diameter, or between six and seven inches round; then lay your roots in the trench, forming them into a ridge, highest about the pole. When the trench is full, and the roots raised in the middle, half a foot above the

level of the earth, then twist a hay rope, of an inch thickness, about the pole, taking care not to draw it too tight: then throw on your earth, and beat it down as mentioned before.

When the trench is thus covered, and made into the form of a grave, then draw out the pole. The hay will remain in the hole, and through this the exhalations occasioned by the fermentation of the roots, will readily escape. After some days, the hole may be covered with a hollow tile, and when hard frost comes on, it should be covered with a flat stone.

XVI. *How to prepare the roots for feeding beasts.*

To induce beasts of all kinds to eat these roots, they should be washed clean, and then cut in pieces. The instrument, used for cutting them, is made of a plate of iron, a foot long, and two inches broad, formed in the figure of an S. In the middle there is a socket about six inches long, in which is fitted a wooden handle, about $3\frac{1}{2}$ feet long. With this instrument, the roots are easily cut in a trough kept for the purpose. A man can, in an hour, chop as many as will serve 12 oxen a whole day. Before the roots are thrown into the trough, they should be split, and cut in quarters. It is of advantage to cut the roots very small; cattle thereby receive more benefit from them.

XVII. *For feeding horned cattle.*

Prepared in the manner above directed, the roots may be given, without any mixture, to horned cattle and sheep, especially if they are for fattening. But if it be necessary to use economy in the consumption of the roots, then a quarter, or more, of chopped hay, or cut straw, may be mixed with them. It will be well to do this for the three or four first weeks for a lean beast, which is put up for fattening; clover, sain-foin, luzerne, &c. are the best for this purpose.

The Dutch cutting-boxes will render this work light and easy.

XVIII. *For horses.*

Horses may be kept the whole winter on these roots, by mixing them half and half with cut straw or hay. Fed in this manner, they will be fat, vigorous, and sleek. But when put to continual hard labour they should have at times some grain.

Hogs will also eat the roots, mixed with the wash commonly given them. They fatten on them as well, if no better than on potatoes.

XIX. *The daily allowance for different beasts.*

The quantity of roots, given to different beasts, will depend on the quantity of dry forage given them in addition; for they should every day have a little dry forage, before they are watered. The quantity must be proportioned to the size and largeness of the beast. It should also be proportioned according to what the beast is designed for. Those, which are for keeping, should have less than those put up for fattening. As the size of the roots is greater or smaller, according to the goodness of the soil where they grew, the quantity cannot be determined by the number. Weight would be more certain, but every one has not conveniences for weighing.

The abbé then proceeds to say, that, from 16,000 roots planted in May, 1785, on two arpents of land, Heidelberg measure, which is about an English acre, he fed seven cows and three calves, constantly, with the leaves, from the beginning of July to the fifteenth of November; and with the roots from the 20th of November to the summer following. The cows were fed twice a day, at each feeding, with 16 or 18 pounds of roots, mixed with one quarter as much cut

straw or hay. Their milk was as good and as plentiful, as in summer, and they were kept in excellent condition.

XX. *How to fatten beesves.*

I put up (says the abbé) four very lean oxen to fatten. They were fed twice a day, each with twenty pounds of roots, mixed with five pounds of cut hay, of the first or second crop. In about a month, by the advice of a sensible farmer, I withdrew the hay, and substituted five pounds of roots instead of it. They were fed two months with roots only, and then were sufficiently fat to be sold. They always ate their food greedily, because it is tender. I found it best to feed both oxen and cows, two or three times a day; as they fatten the faster for it, and as nothing is wasted or lost, which is not the case, when they have it all at once. From this it is easy to calculate, how many roots are necessary to keep a cow, or fatten an ox. It commonly requires four months to fatten an ox, on other food; but with these roots, or with the leaves, it will fatten in three.

XXI. *The quantity that may be raised from an acre.*

An English acre contains 160 perches, each perch $16\frac{1}{2}$ feet square, and each foot 12 inches square: it may be divided into 18,600 squares, of 18 inches diameter. However, making abatement, let us suppose 16, or even 15 thousand, if the land be even of an indifferent quality; it is easy to conceive what an immense quantity of wholesome nutriment may be raised off an acre, and much more, if the soil be suitable, and a little manure added.

XXII. *Advantages of this culture.*

Besides the advantages already mentioned, the scarcity root has this in its favour, that it is a sure crop, not subject to the uncertainties of the seasons. It supplies plenty of food for horses and cattle, which are housed;

and therefore provides a plentiful supply of dung, which is indispensably necessary in agriculture; it will keep down the price of other forage, and enable the farmer to increase his stock, and thereby increase the profits of a farm.

XXIII. *How to raise calves, weaned at twelve days old.*

The scarcity of forage often obliging farmers to kill their calves, it is important for them to be informed, that, by the use of this root, they may wean their calves at ten or twelve days old, and, with a little care and trouble, rear them in the following manner.

When the calves are three days old, they should be presented every day with a little milk, luke-warm, in a wooden vessel; no matter whether they drink it at first or not; it is sufficient if they wet their lips with it. In eight or ten days, they will come to drink it; they should then be weaned: but the whole milk of the dam should be given to each calf, morning and evening, for three or four days: at noon, instead of milk, they should be presented with luke-warm water sprinkled with a little flour. When they are twelve days old, they should not any more have pure milk night and morning, but only luke-warm water, mixed with bran and a little milk. This should be continued for four or five days, proceeding as follows: On the fourth day, present to each calf, from time to time, a little bran; when it begins to lick it, then put before it a handful of bran, and continue this for twelve days, by which time it will learn to eat. The food should be put in a proper place; which should be cleaned well, every time fresh food is put in. After these twelve days, give them three times every day, scarcity leaves, chopped and mixed, with one-third bran, and twice a day whitened water to drink. If it be

winter, the roots will supply the place of leaves. When the calf is four or five weeks old, the bran may be withdrawn and cut hay or straw substituted in its stead, mixed with an equal quantity of roots or leaves. Whatever the calf leaves, should be removed, and it should always be served with fresh provender, to prevent disgust. In this manner, the abbé says, he has found by experience, that calves may be very well raised.



Mr. Carey.

Enclosed I send you an extract from the tour of Arthur Young, esq. in Ireland—The testimony of this gentleman, an eye witness of the fact related, must place it beyond the possibility of a doubt, or supposition of mistake or error. If the publication should induce any of our country gentlemen to try the experiment, I shall be more than paid for the trouble I have taken in communicating it to you.

A. B.

On the use of oxen in husbandry.

LORD Shannon, upon going into tillage, found that the expense of horses was so great, that they eat out all the profits of the farm, which made him determine to use bullocks: he did it in the common method of yokes and bows; but they performed so indifferently, and with such manifest uneasiness, that he imported the French method of drawing by the horns: and in order to do this effectually, he wrote to a person at Bourdeaux, to hire him a man who was practised in that method. Upon the correspondent being applied to, he represented difficulties attending it, the man who was spoken to, having been in Germany for the same purpose. Upon which, lord Shannon, gave direc-

tions, that every thing should be bought and sent over, which the labourer wished to bring with him. Accordingly a bullock of the best sort, that had been worked three years, was purchased; also a hay-cart, a plough, harrows, and all the tackle for harnessing them by the horns, which, with the man, were sent over. His salary was to be four hundred livres per annum, with board, &c. The bullock cost two hundred and eighteen livres; tackle for two bullocks, thirty-six; two carts, three hundred and fourteen; a plough and harrow, one hundred and twenty-three; which, with other expenses, came to forty-five pounds seventeen shillings—and freight, sixteen pounds ten shillings. Upon the whole, the experiment cost, from first to last, to bring it thoroughly to bear, about one hundred pounds. His lordship is persuaded, that the first year of his introducing it at large on his farm, saved him the whole. He has pursued the method ever since, and with the greatest success. He finds the bullocks so perfectly at their ease, that it is a pleasure to see them. For first breaking uplays, and for cross-ploughing, he uses four, but in all succeeding earths, only two—not more for the first ploughing of stubbles. I saw six ploughs doing this in a wheat stubble, and they did it five or six inches deep with great ease. Upon first introducing it, there was a combination among all his men against the practice; but lord Shannon was determined to carry his point in this matter. He followed a course that had all imaginable success—One lively sensible boy took to the oxen, and worked them readily. His lordship at once advanced this boy to eight pence a day: this did the business: others followed the example, and since that, he has had numbers, who could manage them, and plough as

ell as the Frenchman. They plough
 1 acre * a day with ease, and carry
 ery great loads of corn, hay,
 bials, &c. Four bullocks, in the
 rench cart, brought twelve barrels
 f coals, ship measure, each five cwt.
 r three tons: but the tackle of the
 ore couple breaking, the other two
 rew the load above a mile to a forge.
 Two of them drew 35 cwt. of flag
 one three miles, with ease: but lord
 hannon does not, in common, work
 em in this manner: three tons
 e thinks a proper load for four
 ullocks. Upon the bailiff's men-
 oning loads drawn by those ox-
 1, I expressed many doubts—his
 ordship immediately ordered the
 rench harvest cart to be loaded, half
 mile from the ricks—it was done—
 2,200 sheaves of wheat were laid up-
 1 it, and two oxen drew it without
 fficulty. We then weighed forty
 eaves, the weight 251 lb. at which
 te, the 10,200 came to 6475 lb. or
 ove three tons, which is a vast
 eight for two oxen to draw. I
 n very much in doubt whether
 1 yoke they would have stirred
 e cart so loaded. The use of yokes
 out of the question. The only
 mparison now wanting is with
 ollars.



Short account of the planet Herschel.

By Benjamin West, esq. F. A. A.

TIME, ever pregnant with won-
 ders to be unfolded, has at length
 brought to our knowledge another
 planet of our system, which has been
 concealed from the eyes of mortals,
 ever since the creation. Great are
 the works of the Deity! his mysteries
 now inscrutable! even by the most

NOTE.

* $1 \frac{3}{4}$ acre, English or American
 measure.

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strict attention of the human fa-
 gacity. The mind of man never
 fatiated with knowledge, will un-
 doubtedly go progressively on—still
 making more new and marvellous
 discoveries in the works of na-
 ture.

As much has been said, and little
 written, by the American philoso-
 phers, on the subject of this newly
 discovered star, I thought it a tribute
 due to my fellow-citizens, to give
 them this short account of it; and
 that it was first discovered to be a
 planet, by mr. Herschel, after whom
 the planet is named. The British
 astronomers, contrary to all the o-
 ther astronomers in Europe, have na-
 med it the Georgium Sidus, after the
 king of Great Britain; but, let the
 Americans, in agreement with the
 French and German philosophers,
 hereafter distinguish this planet by
 the name of the Herschel.

I know of nothing which led mr.
 Herschel to direct his optic tube at
 this star, more than mere accident.
 From the best accounts, which I can
 get, it was some peculiarity in its
 colour, different from the rest, that
 caused him to give more than ordi-
 nary attention to it; + and, from
 repeated observations, he found the
 star made sensible changes of place
 from time to time; was thence led

NOTE.

+ October 2d, 1782, mr. Her-
 schel mentions some part of his appa-
 ratus, wherein he endeavoured to imi-
 tate the colour of the star; says, he
 was struck with the different colour
 of its light; which brought to his
 mind certain stars in Andromedæ,
 Bootis, Hercules, Cygni, and other
 coloured stars. The planet unexpect-
 edly appeared bluish. October 22d,
 the planet was perfectly defined with
 a power of 227; had a fine steady
 light, of the colour of Jupiter, or
 approaching to the light of the moon.

I

to conclude it was a planet of our system. It is but reasonable to suppose this discovery was immediately communicated to all the astronomers, and philosophers, in Europe; and the first, whom I found attempting any calculations of its motion, was Mr. De la Lande, who, in a letter to the authors of the *Journal des Scavans*, printed in Paris, writes thus:

“Gentlemen,

“In your journal for February, 1782, you have given the elements of the circular orbit which I had calculated for the new planet, which has been discovered by Mr. Herschel: that calculation was found to err $\frac{1}{3}$, about the beginning of the present year; and the errors were such as shewed that the planet had accelerated its motion. About that time, M. de la Place, by an analytical method of his own invention, calculated the elements of its elliptic orbit. He makes the greater semi-axis 19,0818 semi-diameters of the earth's orbit; the half excentricity ,9815: the place of the aphelion, on the 21st of Dec. 1781, to be $11^{\circ}, 23^{\circ} 22' 58''$; true anomaly of the planet, at 18h. 5m. 40sec. mean time, at Paris, $90^{\circ} 20'. 19''$, and its mean anomaly, $102^{\circ} 52'. 7''$.

“Mr. Bode, having remarked, in the ephemeris of Berlin, for 1784, that the star, number 954, of Mayer's catalogue, could not well be any thing else than the planet Herschel, as that star cannot now be found in the place where Mayer observed it; pains have been taken to examine the manuscripts of that celebrated astronomer, which are preserved at Gottingen; and the date of the observation, on which the position of that star was grounded, is September 25th, 1756, at 10h. 21m. 21sec. mean time at Paris; and gives its longitude, at that time $11^{\circ}, 16^{\circ}, 37', 43''$, and its latitude $48', 43''$ south.”

This observation made by Mr. Mayer, nearly twenty-five years prior to that of Mr. Herschel, and found, as it were, by a kind of accident, not to have been expected or hoped for, appears to agree so well with the computation made from the elements of M. de la Place, before recited, that we may look on the orbit of this new planet as already investigated to a great degree of exactness.

Mr. Mayer made this observation when the planet was exceedingly near its aphelion; a circumstance which greatly enhanced its value, as that important point of its orbit was thereby calculated with the greater facility. The place of the node, for the year 1781, is found with great exactness, to be Gemini $12^{\circ}, 47'$, and the inclination of the orbit to the plane of ecliptic, $46', 13''$; the greatest central equation $5^{\circ}, 27', 17''$, when the corresponding mean anomaly is $3^{\circ}, 3^{\circ}, 24', 31''$. From the elements here laid down, the planet's place may be calculated, for any point of time, with great facility and exactness.

From this theory of M. de la Place, I have computed the period of the planet to be eighty-three years, and almost thirty-three days; and from a known theorem, first discovered by Kepler and afterwards demonstrated by the illustrious NEWTON, I find its mean distance from the sun to be 19,041 of such parts as the mean distance of the earth is unity. M. de la Place, as I have before related, computed it at 19,0818, and M. de la Lande, at 18,913; but as mine falls between them both, it gives me reason to hope it is not far from the truth. If we take the mean distance of the earth from the sun, as it has been stated from the two observations on the transit of Venus, viz. in 1761 and 1769, and multiply it by 19,041, it gives, very nearly, 1805 millions of miles for the mean

distance of the Herschel. I have by me, a number of observations on the diameter of this planet, made by Mr. Herschel, with his improved micrometer, and from eight of those which best agree among themselves, I find the mean apparent diameter of the planet to subtend an angle of $4''.06$; and, were the earth to be viewed at the same distance, it would subtend an angle of no more than $.908$ of a second; then, if $4''.06$ be divided by $.908$, it will give $4''.4713$ for the number of times the diameter of the planet exceeds that of the earth; and this, at once, gives for the diameter of the Herschel, 35511 miles nearly; and should its solidity be computed, it will amount to no less than 23,409,870,186,568 cubic miles. And furthermore, if we compare its magnitude with our own planet, it will be found to be nearly as 90,688 to one, or as 117,169 to 1292.



From the Pennsylvania Magazine.

The old Bachelor.—No. V.

Continued from page 91.

Letter to the married man.

DEAR SIR,

I Have read the detail of your numerous misfortunes; but as I judge you have stepped out of your real character, and given me, in masquerade, the history of some disastrous neighbour, I shall take the liberty of conveying, through you, not a sword, sir—I am no duellist—but my best advice to him.

I conjecture that your hero is a knight of the ancient and honourable order of the thimble; one of those party-coloured citizens—in whom the merchant and the mechanic are unmeaningly confounded, arising, some say, from their wilfully mistaking queen Elizabeth's command for a compliment, who,

in reprimanding their want of order in a lord mayor's procession, vociferously called out, march on, tailors; which they curiously converted to the appellation of merchant tailors.

Now, sir, I have no patience with this man, because he has so much. He appears to me, in plain terms, to be a hen-pecked husband, and hens never triumph over any other than a dunghill cock; the want of dignity in the one, begets insult in the other. If he examines himself, he will find that what he calls patience, is fear; his humility, duplicity. Why, sir, it was as much as his head was worth, with all its ornaments, not to go back for the band box. It was not to procure peace, but to prevent punishment, that he obeyed. Little minds have little fears, and tremble at every thing. He timorously submits, because he does not know how to command. Women will naturally aspire to supremacy, when the proper head of a family does not fill out the character: yet they are tempted more by the vacancy, than by any original desire to dispute precedence. A governing woman is never truly happy, nor a submitting husband perfectly reconciled. While he keeps right, she will not go wrong; neither can she possess his place, unless he go out of it. And it infallibly happens, that when a woman acts the man, the man acts the fool.

This, sir, is my opinion of your knight of the woful countenance. Were I young, and had a wife, you should see other doings. I am under much fear for his safety, since the publication of your memoirs of him. I doubt he'll hear of other things than wire caps, and perhaps feel something weightier than arguments. Poor man!

(To be continued.)

Address to the congress of the thirteen states.

LETTER 1.

I AM sorry, gentlemen, that your unbounded ambition, unbridled extravagance, and confounded impudence, oblige me thus publicly to animadvert upon your conduct. Do you expect, then, by threats of coercion to terrify us into the embrace of despotism? Be assured, they will avail you as little as the arts, fraud, and sophistry heretofore made use of. The plan should have been reversed; for by the latter, your weakness has been exposed, and contempt is now the attendant of the former. Shall the independent state of New York be made a dupe to your body? Warmed with the love of liberty, sensible of our importance and strength, and informed of the arts of designing despots, we are neither to be terrified nor deceived. Central in situation, extensive in domain, strong in number, important in commerce, fruitful in agriculture, invincible in war, and inexhaustible in resources, we dare all the terrors of your resentment, and the combination of your powers. View the resitless floods of our Mohawk, with the rolling waves of our Hudson, and behold a picture of our importance and strength; recollect the shores washed by these waters, and the hardy tribes that dwell upon their streams. Observe the forts at West-Point—the key of America.

Do you imagine we will for ever be sporting away local advantages, the gifts of nature, merely to gratify your ambition? have you not tacitly consented to the independence of our rebellious counties in the north, and have not we acquiesced, to please you? and do you imagine we will now betray the interests of our insatuated merchants, by yielding the impost? 'Tis not our duty to suffer our children to

embrace the wished-for destruction, or to listen to their petitions, when we know their interest better than they do themselves. Why are not your high mightinesses disposed to meet the jealousies of our people? Are you not their servants, and created by them? and shall the creature be above the creator? Why would not the impost, granted till the sitting of the next legislature, answer your purpose? a committee of revision would then be appointed, who should examine your accounts of expenditure, and, taking attestations from a proper number of your body, as vouchers of your good behaviour, would then easily obtain a grant of an extension of the impost, provided there was no suspicion of collusion. Hostages should be given us by the non importing states, as an additional security; not that we fear the success of your ambitious aims, for we know our strength;—but to prevent our carrying slaughter and devastation into those states, which, deceived by your chicane, may be disposed to execute your commands. You say it is more reasonable that one state should meet the desires and interest of the united states, than that you should meet the groundless jealousy of one: but this is nothing to the purpose. You hold up to view the resentment of France, Holland, &c. &c. 'Tis a mere bagatelle: Great Britain will as readily become our faithful ally against her natural enemies, as ever France did; and the first ill consequences of a rupture will be felt by the merchants, which will be the just punishment for the espousal of their present measures. It is said the public creditors will be as great a thorn in our side, as were the tories in the late revolution. We have two means of obviating this objection to a rupture. In the first place, we will allure the domestic creditor to exchange your continental for our

te securities; he will consequently then interested to stand with us. And secondly, in place of all such are not caught by this bait, we will adopt the tories, by our alliance with Great Britain. Thus you see, gentlemen, we are prepared for you on all points: perhaps you may hear from me again.

A non-impost man.

New York, April 6, 1786.

N. B. Don't pretend to let any of your emissaries reason with me, because I know they are cunning enough before hand, and shall stop your ears.



LETTER II.

Expected your arts of insinuation were more to be feared than the undisguised efforts of your present power: the event justifies the suspicion. My last week's address has been treated with silent contempt, except by your emissaries abroad; one of whom, sensible of the justice of its sentiments, are unable to conceal their rage and indignation; others, better instructed by you, affect to laugh and call it a burlesque; but we hope to convince the world, by the steadiness of our principles, that we are not the jesting fools you think us; and to convince your high lightnesses, I shall deem the few following observations sufficient.

1st. You say the impost is now the general wish of the best informed citizens of these states. Although you have found means to induce the greater part of the respectable, though insatuated inhabitants of this city, to sign the petition in your favour, lying at the coffee-house and elsewhere; yet your artifices being detected (tho' our legislature may favour it with a hearing) it will be treated as it merits. Impertinent petitions are not always to be attended to,

whether they originate from the dupes of morality or policy; for this reason it is of little consequence to you, that you have lost, by your pride in its style, the names of the greater body of the quakers, (I mention it only as an instance how the wicked frequently betray their own cause :) the quakers are as foolishly tenacious as any people, of what you call national honour, but what they choose to call public honesty: they will tell you "That righteousness exalteth a nation, and that perfidy and injustice are the shame of a people," and a deal of such buckram stuff.

2d. You say that a government cannot subsist without a head; we acknowledge it, but see not the necessity of placing it so high, in respect to the other members, as you wish. We will illustrate our idea by a similitude, drawn from the sea, the great element you pretend (with how much sincerity I will not undertake to say) to have principally in view. The sea turtle—is not his body a perfect piece of machinery? and yet he hides his head under his shell; let the shell resemble the state of New York; we will cover you from every approaching danger; we are able to resist the pressure of national misfortune, and bear up against every impending destruction. You will allow the similitude to be just, as far as it respects the present clumsiness of government. But pray why need you wish to be more perfect than the works of nature? Activity and energy—alas, the most diabolical ideas are couched under those terms—for who is more active and energetic than the devil?

3d. You say that although congress cannot and do not demand the impost of the state of New York, as a matter of right, still she will be answerable to justice and humanity for the consequences of her ob-

stinacy. As the public debt must be paid—as national credit must be established—as neither can be effected but by a fixed, certain, and productive fund—as such a fund cannot be provided but by an equal, general, and permanent revenue—as no one has or can point to a mode of revenue, so easy, so equitable, and so unexceptionable as the impost—as the wisdom of the continent, represented in congress, has for five years deemed it the only efficient mode—the measure appears important and necessary. In answer, I say, the major is false, the minor impertinent, and the conclusion ridiculous. The debt need not be paid; national credit is a proud fancy; funds are the means to betray our liberties; a revenue impoverishes the people; and the wisdom of congress is the ambition of despots.

4th. Your emissaries abroad say we are counteracting our own interest; that the day is assuredly approaching, when payment will be demanded of the foreign debt; the means not being furnished to congress, coercive measures will be pursued by foreign powers. France, justified by our base ingratitude, will levy upon our shipping, perhaps with a predilection to this state; our commerce will be, perhaps, totally obstructed; our merchants ruined; our farmers incumbered with the worthless produce of their industry; our creditors roused to do themselves justice; our affairs thrown into confusion, and the blood of our citizens shed! Pogh, pogh, it's all nonsense; we are no more afraid of the king of France than we are of you: and as for the Hollanders, many of us can talk Dutch to them!

5th. Your emissaries abroad likewise say, that all the arguments made use of by us, to justify the partial appropriation of duties to our own and sole use, apply with greater force

in favour of this city; that we are an importing state, chiefly by means of this city; that nature has given this city this advantage, and that the state ought not to deprive them of their natural rights, nor ought they tamely to yield them; that this city is not more connected with the state, or concerned in its interests and welfare, than this state is, or ought to be, in the interest and welfare of these united states, and that with the impending cloud is ready to bring destruction upon their heads, it would be justified by every principle of retaliation, policy, justice, and nature, to declare their rights and their attachment to federal measures, seek independence from usurpation and to claim protection from the federal head: upon my word, these are great swelling words; but, the baseless fabric of a vision, leaves not a wreck behind. To conclude, and as I shall not attempt to give you any further information in the future, I would advise you, gentlemen, to reconsider the matter; for what end can this restless spirit of emulation answer to you, as individuals? Surely you do not forget that you are soon to return and mingle with the mass of citizens; your very existence depends upon our pleasure, nay our caprice, and then surely you must experience equally with us all the ill consequences of your ill measures. Beware then of the impost, surly ost, the blackest impost that ever winged a passage from hell to punish and pervert a nation.

A non-impost man

New York, April 13, 1784.

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Advantages of newspapers.

THE world was never blessed with any mode of communicating knowledge among the best of mankind, equal to that of newspapers.

ers. No publications are put so frequently into the hands of so many people. No book or pamphlet contains such a variety, especially of historical, political, and moral. These are sent weekly, and at shorter intervals, into the habitations of more than three quarters of subjects of every truly free people. And men must be either very stupid, or excessively vain and contented of their attainments, to perceive themselves they can gain no useful entertainment by giving these articles of information a candid reading once a week. Some there are professedly of this class; but, when the whole truth could be come at, it would appear that a criminal selfishness, a dread at parting with nine ten shillings a year, is the real cause of their complaint.

I said there is no mode of communicating knowledge equal to this: repeat it, notwithstanding some will say the practice of preaching weekly on Sundays and other public occasions, is better adapted to instruct mankind than the mode I am applauding. Preaching is a good institution: and, like every thing else that requires the aid of time and experience to bring it to maturity, is advancing rapidly towards perfection. It is probable the time will come, when this will be equal, in some respects, to the other: it will always be a better polish for the manners and tempers of the people, than the reading of newspapers; but it will be some time yet before the instruction received from this source, in country towns in particular, will be so useful, as to politics, history, philosophy, and morality, as what may be had by a due attention to newspapers.

The assembling together, once a week, of all kinds—black, white, and copper-coloured—of all ranks—officers and privates—of all degrees—

rich, poor, and beggars—of all occupations, from the first minister of state to the scavenger in the street—I say, such an assembly, where each one is endeavouring to please, circumvent, or deceive somebody else—where every one wears a face and garment he has not had on since the last Sunday, though a very curious subject for philosophy, is very beneficial to society.

The benefit resulting from Sundays is not so much in the article of knowledge and general science, as in refinement of manners and behaviour, in taste and civility. Hence it becomes a matter of useful enquiry, whether Sundays, as they have been for many years observed, or balls and assemblies, are productive of most good to society; or rather, as the former are more frequent than the latter, the comparison ought not to turn upon the quantity of good actually produced, so much as upon the natural tendency of these assemblies respectively to work the good of man, by improving manners, behaviour, taste, and refinement.

“A newspaper!” says a young merchant—I ought to have said a huckster—“I take the paper, but do not look into it from one month to another. I cannot spend my time in reading newspapers.” He had rather rub his shoes and buckles, and keep them bright, than rub the rust of ignorance from his mind. But he ought to know that men of ability, in his line of business, acquire useful information in their profession, as well as other branches of knowledge, by attending to these publications. And it may be doubted whether tyranny can rear his iron sceptre over a people, where a free press is enjoyed, and a frequent circulation of newspapers takes place among all orders and ranks of society. But more of this in another delirium.

CRAZY JONATHAN.

ANECDOTES.

AT the commencement of the late revolution, when the French nation appeared inclined to take part in the contest in favour of America, sir Joseph Yorke, the ambassador from England to the United Netherlands, meeting the French ambassador at the Hague, censured his court for interfering in the dispute, and taking so ungenerous a part. "You have been guilty of a dishonourable act, said he, that is unpardonable—no less than that of debauching our daughter." "I am sorry, replied the French ambassador, that your excellency should put such a severe construction upon the matter. She made the first advances, and absolutely threw herself into our arms; but, rather than forfeit your friendship, if matrimony will make any atonement, we are ready to act honourably, and marry her."

NOT long since, a person visited the city of New York, under the style of nobility. For several months his manner of living accorded with his assumed character. His lodgings, his attendants and his equipage, corresponded only with rank and opulence. Fashion received from him its laws, and taste appealed to him as its genuine standard. Balls, assemblies, and entertainments, welcomed him as their principal ornament; while senators and ambassadors were pleased to be enrolled as his companions. In this career of glory, he addressed a young lady, highly respectable for her character and connexions: but, at the very eve of marriage, by the fresh appearance of the ink, which he had used in forging certain deeds, designed as proof of great family property, and by a dispute with a person about the price of the parchment on which

one of them was written, he was discovered to be a miserable vagabond, whom infamy would have blushed to acknowledge as her offspring.

WHEN George Whitefield first came to Charleston, South Carolina, the rev. Alexander Garden was episcopal minister at that place. Not liking Whitefield's principles, he took occasion to preach a sermon against him from the following text,—“Behold, those that have turned the world upside down are come hither also.” In the afternoon of the same day, Whitefield in his turn, retorted upon his antagonist to a very crowded audience and with all the wit and satire which he was so remarkable for. These words of St. Paul, “Alexander the copper-smith hath done me much evil; the Lord reward him according to his works.” Soon after, Garden not to be outdone, took occasion to declaim with some heat, against the light and trifling tunes used in Whitefield's church, as being theatrical and gay for holy worth, and such as had been long appropriated to profane songs and airs. “Very true, doctor,” said Whitefield in his next lecture: “but pray, can you assign any good reason why the devil should always be in possession of the best tunes?”

B O N M O T.

SOME officers of the British army who had served during the American war, walking in Hyde-Park, dressed in their regimentals, met a man deformed by a haunch on his back, when one of them jocularly clapping his hand thereon, exclaimed, “What have you got here, friend!” To which the other, with a countenance expressive of his feelings of the insult, replied, “Bunker's!—damn your red coat.”

P O E T R Y.

A elegy, on lieutenant De Hart, volunteer aide-de-camp
to general Wayne. By colonel Humphreys.*

W H E N autumn all humid and drear,
With darkness and storms in his train,
Announcing the death of the year,
Despoil'd of its verdure the plain :
When horror congenial prevail'd,
Where graves are with fearfulness trod,
De Hart by his sister was wail'd—
His sister thus sigh'd o'er his sod :

“ Near Hudson, a fort, on these banks,
“ Its flag of defiance unfurl'd :
“ He led to the storm the first ranks ;
“ On them iron tempests were hurl'd :
“ Transpierc'd was his breast with a ball—
“ His breast a red fountain supply'd,
“ Which, gushing in waves still and small,
“ Distain'd his white bosom and side.

“ His visage was ghastly in death ;
“ His hair, that so lavishly curl'd,
“ I saw, as he lay on the heath,
“ In blood, and with dew-drops impearl'd.
“ How dumb is the tongue, that could speak
“ Whate'er could engage and delight !
“ How faded the rose on his cheek !
“ Those eyes how envelop'd in night !

“ Those eyes, that illumin'd each soul,
“ All darken'd to us are now grown :
“ In far other orbits they roll,
“ Like stars to new systems when gone,
“ My brother, the pride of the plain,
“ In vain did the graces adorn :
“ His blossom unfolded in vain,
“ To die like the blossom of morn.

“ Oh war, thou hast wasted our clime,
“ And tortur'd my bosom with sighs :
“ My brother, who fell ere his prime,
“ For ever is torn from my eyes.

N O T E.

This young warrior was killed in the attack on the block-house near Fort Lee, 1780.

Enough with war my lay has rung ;
 A softer theme awakes my tongue—
 'Tis beauty's force divine.
 Can I resist that air, that grace,
 That harmony of form and face ?
 For ev'ry charm is thine.—

Of health, of youth th' expanding flush,
 Of virgin fear the flying blush,
 With crimson stain thy cheek :
 The bee such nectar never sips,
 As yield the rose-buds of thy lips,
 When sweetly thou dost speak.

'Tis thine the heaviest heart to cheer,
 Those accents, drank with eager ear,
 So musically roll.
 Where swells the breast, the snow-white skin
 Scarce hides the secret thoughts within ;
 Nor needs disguise that foul.

With thee, of cloudless days I dream ;
 Thy eyes, in morning splendors beam
 So exquisitely fair—
 What taste ! as o'er thy back and breast,
 In light-brown ringlets neatly drest
 Devolves a length of hair.

Unblam'd, oh, let me gaze and gaze,
 While love-sick fancy fondly strays,
 And feasts on many a kiss ;—
 For us let tides of rapture roll,
 And may we mingle soul with soul,
 In ecstasies of bliss !



A song—translated from the French.—By the same.

IT rains, it rains, my fair,
 Come drive your white sheep fast ;
 To shelter quick repair,
 Haste, shepherds, make haste.

I hear—the water pours,
 With patt'ring, on the vines :
 See here ! see here ! it lours—
 See there, the lightning shines.

The thunder dost thou hear ?
 Loud roars the rushing storm :
 Take (while we run, my dear)
 Protection from my arm.

I see our cot ; ah hold !
 Mamma and sister Nance,
 To open our sheep-fold,
 Most cheerily advance.

God bless my mother dear,
 My sister Nancy too !
 I bring my sweet-heart here,
 To sleep to night with you.

Go dry yourself, my friend,
 And make yourself at home—
 Sister, on her attend :
 Come in, sweet lambkins, come—

Mamma, let's take good care
 Of all her pretty sheep ;
 Her little lamb we'll spare
 More straw, whereon to sleep.

'Tis done—now let us haste
 To her ;—you here, my fair !
 Undrest oh what a waist !
 My mother, look you there.

Let's sup ; come take this place ;
 You shall be next to me :
 This pine-knot's cheerful blaze
 Shall shine direct on thee.

Come taste this cream so sweet,
 This syllabub so warm ;
 Alas ! you do not eat :
 You feel ev'n yet the storm.

'Twas wrong—I press'd too much
 Your steps, when on the way :
 But here, see here your couch—
 There sleep, till dawn of day

With gold the mountain tips :—
 Good night, good night, my dove,
 Now let me on your lips,
 Imprint one kiss of love.

Mamma and I will come,
When morn begins to shine,
To see my sweet-heart home,
And ask her hand for mine.



An epitaph written the day after the capitulation of lord Cornwallis, at York-town, in Virginia. By the same.

ALEXANDER SCAMMEL,
Adjutant general of the American armies,
and
Colonel of the first regiment of New Hampshire,
while
he commanded
a chosen corps of light infantry,
at the
successful siege of York-town, in Virginia,
was,
in the gallant performance of his duty, as field-officer of the day,
unfortunately captured,
and
afterwards insidiously wounded—
of which wound he expired at Williamsburg, Oct. 1781.

WHAT, tho' no angel glanc'd aside the ball,
Nor allied arms pour'd vengeance for his fall;
Brave Scammel's fame, to distant regions known,
Shall last beyond this monumental stone,
Which conqu'ring armies (from their toils return'd)
Rear'd to his glory, while his fate they mourn'd,



Anacreontic.

An impromptu, for the pocket-book of a young lady, who expected to embark soon for Europe, and who expressed a wish to be possessed of some manuscript verses written by colonel Humphreys.

MAY you, fraught with ev'ry grace,
All the charms of mind and face,
Ripen fair in wisdom's beam;
Thine the bliss that poets dream;
Happier still thy prospects shine;
And each wish fulfill'd be thine!

Riches make them wings and fly ;
 Envy blasts the buds of joy ;
 Deadly pangs may youth invade,
 When the rosy cheek must fade ;
 Only virtue can impart
 Our defence—it soothes the heart,
 Death disarms, or blunts his dart. }



The genius of America. A song. By the same.

Tune, the watry god, &c.

WHERE spirits dwell and shad'wy forms,
 On Andes' cliffs, mid black'ning storms,
 With livid lightnings curl'd—
 The awful genius of our clime
 In thunder rais'd his voice sublime,
 And hush'd the list'ning world.

“ In lonely waves and wastes of earth,
 “ A mighty empire claims its birth,
 “ And heav'n asserts the claim.
 “ The sails, that hang in yon dim sky,
 “ Proclaim the promis'd era nigh,
 “ Which wakes a world to fame.

“ Hail, ye first bounding barks that roam,
 “ Blue, rolling billows, topp'd with foam,
 “ Which keel ne'er plough'd before !
 “ Here suns perform their uselefs round,
 “ Here rove the naked tribes embrown'd,
 “ Who feed on living gore.

“ To midnight orgies—off'ring dire !—
 “ The human sacrifice on fire,
 “ A heav'nly light succeeds—
 “ But, lo ! what horrors intervene,
 “ The toils severe, the carnag'd scene,
 “ And more than mortal deeds !

“ Ye fathers, spread your fame afar,
 “ 'Tis yours to still the sounds of war,
 “ And bid the slaughter cease ;
 “ The peopling hamlets wide extend,
 “ The harvests spring, the spires ascend,
 “ Mid grateful songs of peace.

“ Shall feed to feed, and man to man,
 “ With discord thund'ring in the van,

“ Again destroy the bliss ?—
“ Enough my mystic words reveal,
“ The rest the shades of night conceal
“ In fate’s profound abyfs.”



The monkey, who shaved himself and his friends.

A fable. Addressed to the hon. ————.

By the same.

A Man who own’d a barber’s shop
At York, and shav’d full many a fop,
A monkey kept for their amusement ;
He made no other kind of use on’t—
This monkey took great observation,
Was wonderful at imitation,
And all he saw the barber do,
He mimick’d strait, and did it too.

It chanc’d, in shop the dog and cat,
While friseur din’d, demurely sat ;
Jacko found nought to play the knave in ;
So thought he’d try his hand at shaving.
Around the shop in haste he rushes,
And gets the razors, soap and brushes ;
Now pufs he fix’d (no muscle misfs stirs)
And lather’d well her beard and whiskers,
Then gave a gasp, as he began—
The cat cried, waugh ! and off she ran.

Next towser’s beard he tried his skill in,
Tho’ towser seem’d somewhat unwilling :
As badly here again succeeding,
The dog runs howling round and bleeding.

Nor yet was tir’d our roguish elf :
He’d seen the barber shave himself ;
So by the glass, upon the table,
He rubs with soap his visage sable ;
Then with left-hand holds smooth his jaw ;—
The razor, in his dexter paw,
Around he flourishes and slashes,
Till all his face is seam’d with gasches. ...
His cheeks dispatch’d—his visage thin
He cock’d, to shave beneath his chin ;
Drew razor swift as he could pull it,
And cut, from ear to ear, his gullet.

MORAL.

Who cannot write, yet handle pens,
Are apt to hurt themselves and friends.
Tho’ others use them well, yet fools
Should never meddle with edge-tools.

The banks of Kentucke. Tune, banks of the Dee.

THE spring was advancing, and birds were beginning
 To sing on the boughs o'er each purling brook ;
 On the early green herbage at leisure reclining,
 I was carelessly viewing the banks of Kentucke.
 Hail, stranger to song ! hail, deep channell'd river !
 Thy prominent cliffs shall be famous for ever ;
 Thy high-swelling floods henceforward shall never
 Obscurely roll down thro' the banks of Kentucke.

Disgusted with idle, romantic pretensions,
 The populous city I lonely forsook ;
 Delighting in nature, with fond apprehensions,
 I eagerly came to the banks of Kentucke.
 O, never did art so much beauty discover,
 To reward the long search of its most raptur'd lover,
 As nature's luxuriant fancy spreads over
 The gay fertile soil, on the banks of Kentucke.

Here genius shall rove with an endless desire,
 Improvements to make without learning or book ;
 While virtue and truth shall forever conspire,
 To bless those that dwell on the banks of Kentucke.
 Here, far from tyrannical power removed,
 The spirit of freedom shall happ'ly be proved ;
 The patriot shall by his country be loved,
 And live without guile on the banks of Kentucke.

Here bigotry never shall raise its foul banner—
 The basis of joy through all ages it shook ;
 The young and the aged, in more happy manner,
 Than those, shall improve on the banks of Kentucke.
 In honest industry their time still employing,
 With heart-cheering mirth all their meetings enjoying,
 With the blessings of friendship, and love never cloying,
 All ranks shall unite on the banks of Kentucke.

Rich plenty, and health, with his visage all glowing,
 Invite and allure us with promising look ;
 Never more to regret other rivers long flowing,
 Nor such as glide down thro' the banks of Kentucke.
 Pale sickness doth pass thro' the land as a stranger,
 No dreadful distemper here frightens the ranger,
 As he passes thro' cane-brakes and waters, no danger
 Expecting to meet on the banks of Kentucke.

FOREIGN INTELLIGENCE.

PETERSBURG, Oct. 20.

THE empress has ordered a levy to be made, of one man in every hundred, of all her subjects, through the several provinces. This will produce at least 100,000 recruits, who will be sent to replace the veterans, that may be destroyed in action, or otherwise, throughout the army.

Frankfort, Nov. 13. It is calculated, that from 1776, to 1786, the number of emigrants, from the Palatinate of the Rhine, amounts to 9000, notwithstanding which the population has increased 21,099 souls, the number of people being at this moment 404,085 persons.

Edinburgh, Nov. 26. On Saturday last came on, at the hall of the royal medical society, the annual election of presidents, when the following gentlemen were chosen :

James C. MacLairn, of London.
Theobald M'Cenna, A. M. County Tipperary.

John Fleming, M. A. Westmeath.
Benjamin Smith Barton, A. M. Philadelphia.

London, December 4.

An overture for a triple alliance between the house of Bourbon, and the courts of Petersburg and Vienna, had been put in a train of negotiation by the court of France, and the final accomplishment of it had been urged by that restless people, with all the industry and zeal that ambition, interest, and a natural love of mischief could inspire.

A complete stop has been put to the ambitious project, by the prudence and judicious policy of Russia.

The Russian clergy have offered the empress 100,000 roubles, towards carrying on the war against the Turks.

The following may be depended on, as an accurate statement of the importation into Kingston, Jamaica,

Vol. III. No. III.

from the united states of America, from December 31, 1786, to March 18, 1787.

Staves, heading, and shingles		2,453,000
Lumber	feet	440,000
Boards		72,124
Ditto	feet	346,000
Spars		100
Oars		120
Masts		7
Pieces of timber		342
Hoops		301
Plank	feet	48,813
Bread and flour	casks	6,083
Ditto, barrels		1
Meal, ditto		250
Corn, hogheads		2
Ditto, barrels		8,783
Peas, barrels		43
Rice, tierces		441
Ditto, casks		1,252

On the 16th ult. their high mightinesses declared null and void the act of confederation, signed at Amsterdam by seventy-five regents, the 8th of August last; and resolved to defend, with their lives and fortunes, the establishment of the stadtholder.

Dec. 21. In consequence of a council held on Wednesday, at the Cockpit, it was determined immediately to commence a new coinage of copper; and, in order to put a total stop to counterfeited half-pence and farthings, which are now so great a burden to the public, it was resolved, that in the new arrangement, one pound of copper should be made into twenty four half pence, instead of eight and forty, which has been the practice hitherto, and the farthings in the same proportion of size and weight.

These resolutions will be put into execution in the course of a few weeks: and an order of council will probably be issued almost immediately to stop the circulation of counterfeited copper.

L

DOMESTIC INTELLIGENCE.

Lexington (Kentucke) Nov. 12. We have received information that a few days ago, the Indians killed three men on the road from Kentucke to Cumberland, and that a great body of Indians have since been seen near the Sinking Spring, supposed to be at least two hundred in number, and appeared to be making towards the Wabash.

Norwich, Jan. 24. Within the compass of twelve miles from the State-house in this town, no less than eight bridges have been destroyed by the flood, occasioned by the storm of the 16th instant.

Charleston, (S. C.) Jan. 15. We are informed by good authority, that Mr. Squibb has discovered a new species of *Oryza*, or rice, indigenous to this state. The plant ripens its seed in June, and appears to be perennial.

Jan. 31. Major Butler stated yesterday to the house of representatives, that he had just received a letter from Georgia, from a member of the legislature at Augusta, mentioning that they had sent several dispatches to congress, earnestly requesting assistance against the Indians, but received for answer, that there was not a sufficient number of members to constitute a congress, and therefore no relief could be sent, and that Georgia could not raise any men; which had given additional spirits to the Indians, who were preparing for war in greater force than before.

Feb. 28. A new mode of applying steam to machinery has been discovered by messrs. Isaac Briggs and William Longstreet, both of Georgia; and sanguine expectations are formed of its utility. We have been favoured with the following description, viz. Their engine is so constructed, that the steam operates, alternately, at each end of an horizontal cylinder, on a piston, which it causes to vibrate both ways with equal force;

that this force is not checked by cooling the cylinder, the unavoidable consequence of an injection of cold water, but that an alternate condensation, in the cylinder on each side of the piston, is effected by means of metallic pipes surrounded by cold water, so that there is always a vacuum on one side of the piston, when the steam is acting on the other; and that the steam, when condensed, becoming warm water, is forced into the boiler again by a small pump.

Baltimore, Feb. 29. The legislature of the state of North Carolina have called a convention, for the purpose of "discussing the momentous subject of the federal constitution, to meet on the seventeenth day of July next.

Springfield, March 5. We hear from Ludlow, that about five or six weeks ago, a dog belonging to Mr. David Fuller of that place, ran mad and bit a number of cattle; several of which, about three weeks afterwards, were seized with violent mania, and have since died. Mr. Fuller himself was also bitten by the dog, about the same time, on his hand, in such a manner as to make the blood come very freely; but we are happy to hear, that it has not, yet, produced any bad effect.

Elizabeth-town, March 5. A company of men, in the state of New York, have, in violation of the constitution, and to evade the existing laws, taken a lease from the Mohav Indians, for nine hundred and ninety nine years, of 12,000,000 acres of land, at the annual rent of 125. The matter has been canvassed before the legislature, who have deemed the procedure illegal, and the lessees not entitled to any emolument accruing from it. They consider to all intents and purposes, a purchase which their laws forbid.

Carlisle, March 5. A narrative of facts, respecting the manner

which the prisoners were liberated from their confinement in the jail of Cumberland county, on Saturday the 1st of March, instant :

It is presumed the public are already in full possession of the cause which gave rise to the following transactions, viz. the opposition made by some of the inhabitants of the borough of Carlisle, to the rejoicing intended to be celebrated by the federalists, on the 26th and 27th of December last. It is already known, that a number of depositions were taken in the office of John Agnew, esq. with an intention to criminate the several persons who were active in opposing said rejoicing, on which depositions, or other information, laid before the honourable the supreme justices of the state of Pennsylvania, a warrant was issued, charging the said opposers with divers unlawful acts, &c. and commanding the sheriff of this county to apprehend twenty persons therein named, and take them before some of the justices of the supreme court, or any of the justices of Cumberland county, to answer to the premises, and be dealt with according to law. Some time after, the sheriff received the warrant, and called upon the defendants, and informed them such warrant was in his hands—each person willingly agreed to appear at any time he might think proper, before any magistrate of this county : he thought proper to appoint Monday the 25th of February last, for them to appear before John Agnew, esq. which they readily complied with. The warrant being read, which exhibited the charge of a riot against the defendants, they demanded that they should be confronted with the witnesses, and offered, if permitted, to produce sufficient evidence to exculpate themselves from the charge alleged against them, which was refused,

as the magistrate was of opinion, that it was not in his power to supersede a warrant issued by the supreme justices. In the interim, a country magistrate arrived, who had been previously sent for by John Agnew, esq. After a short consultation they came forth, and the country justice told the defendants that in his opinion the warrant admitted of a hearing, but added, that he was determined not to act in the matter, and advised the defendants to accept of a proposal made by mr. Agnew, which was, to remain in the custody of the sheriff, until the 25th of March next, at which time mr. Agnew hoped to have instructions from the supreme justices. Seven of the defendants absolutely rejected the proposal, unless they were assured of an investigation of the premises at the time above mentioned, which was likewise refused. Bail was then demanded by the justice; the defendants answered they were conscious that they were guilty of no crime against the laws of their country; and as they were prosecuted to gratify party-spite, they were determined not to enter bail on the occasion, but would otherwise willingly comply with the orders of his worship; upon which mr. Agnew wrote and signed their commitment, and gave it to the sheriff, who conducted the prisoners to the county jail. Immediately the country took the alarm, on hearing that a number of persons were confined in prison for opposing a measure that was intended to give sanction to the proposed federal constitution. The people, who composed the different companies of militia in this county, thought proper to collect, and appointed to meet in Carlisle, on Saturday last, to enquire why those persons were committed, and at the same time determined to act agreeably to the opposition offer-

ed them by the rejoicing party. Accordingly about sun-rise the bell began to ring, and the men under arms made their appearance from different quarters, who previously had appointed one person from each company to represent them in a committee, for the purpose of consulting on such measures as might be most expedient on the occasion. Previous to their meeting, five persons with delegated power from the people of Dauphin county, had met a number of federalists, and had proposed terms of accommodation. In one hour the federalists promised to give them an answer, at which time they accordingly met, together with the committee appointed by the different companies, who immediately agreed upon terms of accommodation, and mutually consented to transmit a petition to council, signed by a number of respectable persons on both sides of the question; they then agreed that the sheriff should sign the following discharge.

Be it known, that I Charles Leeper, esq. sheriff of Cumberland county, do hereby discharge from their imprisonment in the jail of this county of Cumberland, the following persons, viz. James Wallace, William Petrikin, Thomas Dickson, Samuel Greer, Bartholomew White, Joseph White, Joseph Young, and Joseph Steel.

CHARLES LEEPER, sheriff.

After the above agreement was ratified, the militia were marched under their respective officers from the public square to the jail, where the sheriff conducted the prisoners to the street: having read the above discharge, they were restored to their former liberty with loud huzzas and a feu de joye from right to left of the companies, who then marched out of town in good order, without injuring any person or property, except by firing two balls through a tavern-keeper's sign.

New-York, March 10. Elisha Thomas, of New-Durham, in New Hampshire, whom, not long since, we mentioned to have murdered a captain Drown, made his escape, but soon after was apprehended, and committed to the jail in Dover. Thomas left at home his wife and six children. Some days after, his wife, taking with her, her youngest child in her arms to one of the neighbours, set out for Dover, to see her husband. In the night, the other five being in bed, the eldest of them was awaked from his sleep by the falling of a board from the wall on the bed, which, with the house, he saw was in a flame. Springing instantly from the bed, he in vain attempted to save from the flames his four brothers and sisters, who, with the house, in a short time were reduced to ashes, himself only escaping to tell the news.

The representatives of the quakers in New England, have petitioned the assembly of Rhode Island, against the act for making paper money a tender, and likewise against that for making notes and accounts void, if not settled in two years. The assembly have received the petition, and referred it to the next session, ordering copies of it, in the mean time, to be published and distributed.

The state convention of New Hampshire has adjourned from Exeter to Concord, about one hundred miles inland, there to meet on the third Wednesday in June next. Previous to this adjournment, for eight days, very warm debates were had upon the propriety of adopting the constitution.

By the accounts received last evening, we find, that the adjournment of the convention of New Hampshire was carried by 56—against 51.

Boston, March 10. A gentleman in this town has received a letter from Charles Logie, esq. his Bri

the majesty's consul at Algiers, 1 Nov. 5, 1787, of which the wing is the substance: after giving an account of his being obliged to confine himself to his own room above a year, on account of plague, he observes, that notwithstanding the distressed situation of unhappy American captives are by being obliged to mix and live in common with the natives, whom upwards of three hundred died of a day, yet only three of twenty-two have been taken by that distemper—he mentions the death of capt. Coffin, a brother captain Suabeal Coffin, after a lingering illness, on the 2d of November, and that he had afforded every assistance in his power—well as to the captains of ships, to the American people in general there; and this, he says, not only from the common motives of humanity, but from gratitude, bearing in mind the many civilizations he met with in Boston, from a great number of its respectable inhabitants, upwards of twenty years ago. Mr. Logie likewise says, that the cause of humanity would be greatly promoted, by a subscription for the relief of the unfortunate American sufferers, now in servitude here.

Friday a resolve passed the honourable house of representatives (but not by a very full vote, the majority being but about eleven) for pardoning and restoring to the privileges of a freeman, the famous capt. Luke Day, who for some time past has been confined in jail in this town.

March 13. The legislature of this state has repealed the law offering a reward for the apprehending Daniel Shays, &c.

A petition has been presented to the general court by Shays and Parsons, praying a pardon, which, it is said, will be granted.

Philadelphia.

March 3. This day, pursuant to his sentence John White, alias John Tracey, was executed on the commons, for piracy and murder.

March 6. The quarter sessions of the county of Philadelphia began on last Monday in this city. Only three bills for larceny, or any other infamous crime, were found by the grand jury; and the property stolen in those three cases amounted to no more than sixty-two shillings.

The assembly of Rhode Island have passed an act appointing the 4th of March, inst. for the people of that state to convene in town meetings, and there to consider and determine upon the expediency of adopting the proposed constitution.

March 10. The committee appointed by the general assembly, to consider the petitions presented in favour of the distressed Africans, praying a prohibition of the slave-trade, and an extension of the act for the gradual abolition of slavery, made a long and liberal report upon the subject, and it is referred to the same to bring in a bill, to prevent the mischiefs complained of, and to amend the existing law.

The committee appointed on that part of the message from council, respecting the passing a declaratory act, upon the subject of the treaty with Great Britain, made report of a resolution, that the executive council be informed, that the house cannot find any act now in force, which is repugnant to that treaty, or any article thereof, or that tends to restrain, limit, or in any manner impede, retard or counteract the operation and execution thereof, or to explain the same.

March 19. The hon. George Handly, esq. is appointed governor of the state of Georgia, in the room of general Jackson, who has resigned.

An Augusta paper of the 16th ult.

says, " We hear from Green county, that on Saturday the 2d instant the Indians killed captain Autry near Richland creek."

March 20. The manufacturing society of this city have at length obtained two complete machines for carding and spinning cotton, one of which cards forty pounds of cotton per day, and the other spins fifty threads at a time. We feel infinite pleasure in communicating this agreeable intelligence to the public, and we have no doubt, that by application to the society, private persons or companies will be informed how they may be supplied with them. As they are of the greatest consequence to this country, we beg leave to suggest the propriety of gentlemen in every town in the state joining to procure one of each. Five lads of fifteen years of age, and a girl of twelve, may tend four spinning and one carding machines, which will card and spin 12,000lb of cotton per annum.

It is earnestly hoped that the southern states will pay the most immediate and the most unremitting attention to the cultivation of cotton, to which their soil, their climate, and their population, are all adapted. Without cotton, the newly acquired machines will be of no value; with abundance of that raw material, they may perform wonders.

March 24. By a letter from Georgia, we are informed " that gen. Clark lately fell in with a considerable body of Indians, who were defeated after a short conflict. A body of three hundred of them attacked a fort on the Oconee, and were repulsed with considerable loss. They are well armed, and have lately received a great supply of military articles from Pensacola."

Late accounts from Pittsburgh mention, that on Monday the 11th of February last, the superintendent of

Indian affairs dispatched messengers to invite the chiefs of all the tribes within the northern district to a general treaty, in the spring, to be held by him and the governor of western territory in conjunction with the order of congress, in order, if possible, to settle all uneasiness existing between the united states, and the Indian nations, and to establish a lasting peace; much is expected from the abilities and accommodating disposition of those gentlemen, whose characters, both public and private, are well known. The superintendent left the same day to New York to make the necessary arrangements.

It is recommended to the landholders of Pennsylvania, especially those who own unimproved land heavily timbered, to consider the method of making pot-ash practised by the farmers of Russia and Sweden, as related in Postlethwaite's dictionary, and the Encyclopædia Britannica. They will find a method of clearing their lands of timber profitable to themselves, and very beneficial to the commerce of the state. It is believed, that a tax greater than our impost, might be made by attention to this article. The people of New York have long enjoyed the benefits arising from it, and as it serves for a remittance to Europe, great sums are kept in the state, which would otherwise be exported.

The committee appointed by the general assembly on the 14th of September, to visit the Pennsylvania hospital, reported,

That they have performed their service, and had the pleasure to find the house in perfect good order, all the patients accommodated, with an appearance of decency and comfort highly commendable.

From the information received of the attending managers, and the observation of the committee, the

nk it their duty to report, that managers and persons employed the institution appear to have at merit in the execution of this irritable service.

tract of a letter from New York, March 26.

' Capt. Prince, from Cayenne l St. Eustatia, at his departure, at the former port the brig thington, capt. Gardener, be- ging to Rhode Island, and the p Black Prince, capt. Newman, onging to Philadelphia, both ves- s from Africa with slaves."

March 29. This day the gener- assembly of this state adjourned, meet on the 2d Tuesday in Sep- tember next. Previously to their ounment, the house ordered five ndred copies of the supplement to : law for the gradual abolition of very, and the same number of pies of the militia law, to be print- , and forwarded to the prothono- ies of the respective counties, for e information of the public.

The committee of the assembly pointed to consider the operation the penal law of this state, re- ported that it would be proper to point a committee to bring in a ll, to alter and amend the same. motion was made by dr. Logan repeal the law, but it was contra- y to the general sense of the house, nd accordingly rejected.

March 31. Late accounts from Charleston mention, that the fires n that city have been so frequent nd so fatal, that there is reason to aspect they have been occasioned by ae same gang of incendiaries who ave lately travelled from New York o that state.

BANKRUPT'S.

Ann Gibbs, of the city of Phi- adelphia, merchant.

John Ferguson, of the city of Philadelphia, merchant.

Dean Timmons of the city of

Philadelphia, tallow chandler, deal- er, and chapman.

William Tilton, late of the city of Philadelphia, now of the town of Pittsburg, merchant.

Stacy Hepburn, of the city of Philadelphia, merchant.

Joshua Smith, late of Egg Har- bour township, county of Gloucester, state of New Jersey, now of the city of Philadelphia, merchant.

James M'Cutcheon, of the city of Philadelphia, victualler and butcher.

Hugh Newbigging, of the city of Philadelphia, merchant.

Richard Mason, of the city of Philadelphia, merchant.

John Fowler, of the township of Lampeter, in Lancaster county.

MARRIAGES.

Massachusetts. At Boston, Mr. John Allen, printer, to miss Sally Rand, of Charlestown.

New York. Mr. Charles Wilkes to miss Shaw; mr. Abraham Frank- lin, to miss Ann Townsend of Long Island.

Maryland. At Baltimore, Mr. James Croxall to miss Nelly Gittings.

South Carolina. At Charleston, mr. William Cam, merchant, to miss Wigfall; capt. John Troit, to miss Mary Fendid.

Georgia. At Savannah, mr. Fre- derick Herb, to miss Mary Brown; mr. Robert Holmes to miss Batsley Butler.

DEATH.

In Great Britain. Paul Fisher, esq. of Clifton, near Bristol, who has left to the society for propagating the gospel two thousand pounds, of which five hundred pounds is for propagating the gospel in America; five hundred pounds for encouraging the protestant working schools in Ireland; and the remaining one thousand pounds for the use of the first bishop that shall be appointed in America, with the interest of the same, provided a see be constituted in twenty-five years.

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THE
AMERICAN MUSEUM,

OR
REPOSITORY

OF ANCIENT AND MODERN
FUGITIVE PIECES, &c.

PROSE AND POETICAL,

For APRIL, 1788.



..... "With sweetest flow'rs enrich'd,
From various gardens cull'd with care."
..... "Collecta revirescunt."

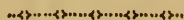


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T H E

A M E R I C A N M U S E U M :

For A P R I L, 1788.



servations and conjectures on the earthquakes of New England. By professor Williams, F. A. A.

IN looking over some of the histories of New England, I observed that the religious turn of mind, which distinguished the first planters of New England, had led them to take notice of all the earthquakes which happened in the country, ever their arrival. Several of them seemed to be pretty well described: and in some of their phenomena, there seemed to be an agreement. In several of these accounts were contained in writings but little known, I thought it might be of some service to philosophy, if a particular account of them could be collected. This is what I have attempted in the following treatise. In the first part of it, I have set down the most particular accounts I could find of their phenomena. The second contains observations and remarks upon their agreement and operations. In the third, conjectures are proposed as to their causes: and in the fourth, some general reflexions are added, as to their nature, use, and effects.

The most likely way to come to the knowledge of their causes, is to

observe all the phenomena that attend them. That the reader might have a true account of these phenomena, it was my endeavour, in the accounts and observations; to note all the particulars, which seemed to relate to them, however minute or trivial some of them might appear. With this view I consulted all the accounts I could find. From several of them (the honourable professor Winthrop's lectures on earthquakes, in particular) I have received much help. Others referred to authors, of which I could not have the advantage of a perusal. That gentlemen of science might have it in their power to examine with what fidelity and care the accounts are drawn up, or how far they might be depended upon, I have constantly referred to the authors from which they are taken. Some of the accounts, I am sensible, are greatly imperfect. As all our conjectures, theories, and reasonings, must depend on the accounts, it is much to be wished, that something more accurate and perfect, as to several of them, might be transmitted down to posterity,

What is proposed, as to their causes, will be judged of, by the degree of probability and evidence with which it is attended. In all

philosophical hypotheses, a writer is in danger of making more of his subject than will bear a strict examination. I have found some difficulty in guarding against this: and whether, at last, I have not carried conjectures, in some things, too far, the reader must judge for himself. After all, the revolutions of time will afford the surest proof of the truth or errors contained in the following pages. I would, therefore, make it my request to posterity, to note, with care and accuracy, the phenomena that may attend any future earthquakes in New England: that, if what is here advanced as to their causes, shall be found to be true, it may be confirmed: but if found to be false, it may meet with the fate of other errors, and be rejected. The cause of truth and science is of infinitely more importance, than any of our schemes or conjectures: and this is what I wish may prevail, in all countries, and in all ages.

An historical account of the earthquakes of New England.

THE English arrived at Plymouth, in New England, November 11, 1628. The first earthquake that happened in the country, after their arrival, was on July 2, 1638. O. S. The manner of its approach, and the violence to which it arose, are pretty well described in accounts which are yet existing. It is described as having been preceded with a rumbling noise or low murmur, like remote thunder. As the noise approached, the earth began to quake, till the shock arose to such a violence, as to throw down the pewter from the shelves, stone walls, and the tops of several chimnies; and, in some places, made it difficult for people to avoid falling. The course of this earthquake in some of the accounts, is described as being from

the westward to the eastward. others, it is represented as coming from the northward, and going southward. It is not likely a great care or accuracy was employed, to determine what particular point of the compass the roar of the earthquake came from; but only to fix to that, which was judged to be the nearest cardinal point, which so thought was the west, others north. It is most probable, therefore, that a middle course, from about north west to south east, was the true; as this will best agree with and reconcile all the other accounts that were given of its course. At what extent this earthquake reached on any point of the compass, have no way to determine. It is said in general, that it reached far to the land, and was observed by the Indians much beyond any of the English settlements, which then were but of small extent: and also, that some vessels, which were near the coast, were shaken by it. In about half an hour there was another shock, but not so long or strong as the former*.

Omitting a shock on October 2, 1653, as too small to occasion a general notice, the next memorable earthquake was in 1658. In all the ancient histories, this is mentioned as a great earthquake. But I cannot find any account of the month, day, violence, course, effects, extent, or any other particulars of it.

On January 26, 1663, O. S. "the shutting in of the evening†," and another memorable earthquake shook New England. From the general expressions the writers, who speak

NOTES.

* Vide Johnson's, Hubbard's and Morton's accounts of this earthquake.

† Morton.

use, it seems to have been one of the greatest this country ever felt. is represented as being preceded with a great noise and roar. Mention is made of the houses rocking, the pewter falling from the shelves, the tops of several chimnies falling, the inhabitants running out into the streets, passengers being unable to keep on their feet, &c. As to its course, duration, or extent, nothing is to be found in any of the New England writers. But they are well described in the accounts that were given of this earthquake in Canada. At the same time, Feb. 5, 1663, N. S. "about half an hour after five in the evening," a most terrible earthquake began there. The heavens being very serene, there was suddenly heard a roar, like that of great fire. Immediately the buildings were shaken with amazing violence. The doors opened and shut of themselves, with a fearful clattering. The bells rang, without being touched. The walls split asunder. The floors separated, and fell down. The fields put on the appearance of recipices: the mountains seemed to be moving out of their places: and amidst the universal crash which took place, most kinds of animals sent forth fearful cries and howlings. The duration of this earthquake was very uncommon. The first shock continued half an hour before it was over; but it began to abate in about a quarter of an hour after it first began. The same day, about eight o'clock in the evening, there was a second shock, equally violent as the first: and in the space of half an hour, there were two others. The next day, about three hours from the morning, there was a violent shock, which lasted a long time: and the next night, some counted thirty-two shocks; of which, many were violent. Nor did these earthquakes cease until the July following.

New England and New York were shaken with no less violence than the French country. And, throughout an extent of three hundred leagues, from east to west—and more than one hundred and fifty, from north to south—the earth, the rivers, and the banks of the sea, were shaken with the same violence. The shocks sometimes came on suddenly; at other times by degrees. Some seemed to be directed upwards: others were attended with an undulatory motion.—And throughout the vast extent of country, to which they reached, they seemed to resemble the motions of an intermitting pulse, with irregular returns; and which commenced through the whole at the same hour.

This earthquake was attended with some remarkable effects. Many fountains and small rivers were dried up. In others, the water became sulphureous: and in some, the channel, in which they ran before, was so altered, that it could not be distinguished. Many trees were torn up, and thrown to a considerable distance: and some mountains appeared to be much broken and moved. Half way between Tadoussac and Quebec, two mountains were shaken down: and the earth, thus thrown down, formed a point of land, which extended half a quarter of a league into the river St. Lawrence. The island Aux Coudres, became larger than it was before: and the channel of the river became much altered*.

From these accounts, it is evident, that Canada was the chief seat of these concussions: and of consequence, as it proceeded from those

NOTE.

* Vide Frezier's voyage, p. 210, 211. Journal des Sçavans, Mai, 1678. Charlevoix's histoire de la Nouvelle France.

parts, its course must have been some point between the west and north; probably much the same with that of 1638.

After an interval of sixty-four years, (in which there had been several small shocks, but none so violent as to occasion a very long remembrance†) there came on another very memorable one, October 29, 1727, O. S. About 10 h. 40, P. M. in a very clear air and serene sky, when every thing seemed to be in a most perfect calm and tranquillity, a heavy rumbling noise was heard. At first, it seemed to be at a distance, but increased as it came near, till it was thought equal to the roar of a blazing chimney, and at last to the rattling of carriages, driving fiercely on pavements. In about half a minute from the time the report was first heard, the earthquake came on. It was observed, by those who were abroad, that as the shake passed under them, the surface of the earth sensibly rose up, and then sunk down again; which must have produced an undulation of the earth or a motion like that of a wave, both perpendicular and horizontal: first rising in a perpendicular direction, and as it subsided, spreading itself in a horizontal direction all around. The nature, therefore, or kind of the

NOTE.

† In Phil. Trans. No. 437, mention is made of earthquakes in 1660, 1665, 1668 and 1669. Dr. Mather speaks of earthquakes in 1670 and in 1705. There was another in 1720, on January 8. But these, with some others, having been too small to occasion a general notice, and being only mentioned without any particular account of them, are passed by, as not affording us any light with regard to the nature, cause, or effects of these phenomena.

motion, was undulatory. The violence of the shock, like that of the other great earthquakes, was such to cause the houses to shake and rock as if they were falling to pieces. The doors, windows, and movable furniture made a fearful clattering. The pewter and china were thrown from their shelves. Stone walls and the tops of several chimnies were shaken down. In some places, the doors were unlatched and burst open, and people in great danger of falling. There were various opinions as to the duration of this earthquake. The most probable is, that the shake began about half a minute after the roar was first heard, and rose to its greatest height in about a minute more: and was about half a minute in going off. Whence, the duration may be supposed to have been about two minutes. It was very generally agreed that the course of this earthquake was from north-west to south-east. "The noise and shakes," it is said, "seemed to come from the north-westward, and to go off south-easterly: and so the houses seemed to reel." This account of its course, was confirmed by all the others, one or two excepted, which differ so much from one another, that nothing can be determined from them. With regard to the limits of this earthquake, it extended from the river Delaware, in Pennsylvania, south-west, to Kennebeck, north-east. At both these places, it was sensibly felt; though the shake was but small. Its extent therefore, from south-west to north-east, must at least have been several hundred miles, and probably many more. As to its other limit, from north-west to south-east, we have no way to determine how far it extended. It was felt by vessels at sea and in the most remote westerly settlements. As it came from the unknown parts, between the west and

th, and passed off into the sea, is probable it might run some thousand miles in such a course.

There were several effects attending this earthquake, which seem worthy of remark. Besides what is common, as to the throwing down water, fences, &c. it was observed, at several springs of water, and wells, which were never known to be dry or frozen, were sunk far down to the earth. Some were dried up, the quality of the water mended in some, and so altered in others, as to freeze in moderate weather. Some spots of firm dry soil, became perfect quagmires; and others, which were full of mire and water before, became more dry. The centre of this earthquake, or place of greatest violence, seems to have been at Newbury, a town which lies at the mouth of Merrimack River. There," according to dr. Colman's account, "the earth opened, and threw up several loads of a fine sand and ashes, mixed with some small remains of sulphur; so that, taking up some of it between the fingers, and dropping it into a chaffing-dish of bright coals, in a dark place, once in three times the blue flame of the sulphur would plainly arise, and yield a very small scent. By this it seems evident, that it was a sulphureous blast which burst open the ground, and threw up the calcined bituminous earth*."

NOTE.

* Phil. Transf. No. 409. What is here said of its being a sulphureous blast, seems to be confirmed by the account which mr. Dudley sent to the royal society, in which he says, "A clergyman, in a town about twenty miles from Boston, assured me, that immediately after the earthquake, there was such a stink,

Concerning this earth which was thrown up, the rev. mr. Lowel, minister in Newbury, mentions an uncommon circumstance. "One thing," says he, "I may add, which is very remarkable, and which may be depended on: that about the middle of April, the fine sand, which was thrown up in several places in this parish, at the first great shock, October 29, had a very offensive stench; nay, was more nauseous than a putrifying corpse: yet, in a very little while after, it had no smell at all. How long it was, before it began to have this stench, I am not certain. I know it had it not at first: and, I believe, it was covered with snow till a little while before.— There is no smell now†." These accounts refer to matters so easy to be known, that there is no room to suspect that the authors (both gentlemen of a philosophic taste, as well as of eminence in their particular professions) could be mistaken. And it seems highly probable, from their observations, that the sand, which was thrown out by the earthquake, contained some very noxious, ill-scented vapour, or effluvia; which, so long as there was nothing to confine it, passed away in quantities too small to be perceptible by the senses: but when it was kept together by the snow, gathered in such quantities,

NOTE.

"or strong smell of sulphur, that the family could scarce bear to be in the house for a considerable time that night. The like is also confirmed from other places. Persons of credit do also affirm, that just before, or in the time of the earthquake, they perceived flashes of light." Phil. Transf. No. 437.

† Letter to dr. Colman. Phil. Transf. No. 409.

as strongly to infect the air, when the melting of the snow gave it liberty to evaporate freely.

Some phenomena were observed a few days before this earthquake, which deserve our notice, as having, probably, some connexion with its approach. The rev. mr. Allin, then minister of Brooklyn, took notice of an uncommon alteration in the water of some wells. "About three days," says he, "before the earthquake, there was perceived an ill-smelling smell in the water of several wells. Not thinking of the proper cause, some searched their wells, but found nothing that might thus infect them. The scent was so strong and offensive, that for about eight or ten days, they entirely omitted using it. In the deepest of these wells, which was about thirty-six feet, the water was turned to a brimstone colour, but had nothing of the smell; and was thick like puddle-water†." We have this account confirmed by mr. Dudley.—"A neighbour of his, who had a well thirty-six feet deep, was, about three days before the earthquake, surprised to find his water, which used to be very sweet and limpid, stink to that degree, that they could make no use of it, nor scarce bear the house when it was brought in: and imagining that some carrion was got into the well, he searched the bottom, but found it clear and good, though the colour of the water was turned wheyish, or pale. In about seven days after the earthquake, the water began to mend: and in three days more, it returned to

NOTE.

† Account of the earthquake of 1727, by mr. Allin.

"its former sweetness and colour*. And just before the earthquake began, several wells were found to have no water in them, which had great quantities before and after. To whatever cause the alterations in these wells may be ascribed, it can hardly be thought but that they had some connexion with the earthquake, which in a few days ran through the whole country. Several shocks were felt in the northern parts of New England, for some months after the 29 of October: but they were generally small, and of a short duration†.

In 1732, there was an earthquake which, though small, was of a considerable extent. It came on September 5, O. S. at about 11h. A. M. being attended with a rumbling noise and was of such violence, as to occasion a considerable jarring of the houses. The duration of it was no more than ten or fifteen seconds. The earthquake was much more evident at Montreal, in Canada, then it was in any part of New England; being attended with considerable damage there. As this was the chief seat of it, it seems to have come from thence, in a north-westerly course, to New England. Its extent, from south-west to north-east was equal to that of most of the earthquakes that have been in the country; being felt from Maryland to the north-easterly parts of New England: and from north-west to south-east, it reached from Montreal, and probably from man

NOTES.

* Phil. Transf. No. 437.

† The account of this earthquake is collected from the printed account of it in the philosophical transactions, and by several of the New England ministers.

miles beyond it, to the sea coast.*

From the year 1732, though there had been some small shocks, there was none that occasioned a general notice, till 1744. That year, on June 3, O. S. a fair and hot day, there was an earthquake, so considerable, as to be generally felt thro' the province. It began a few minutes after 10h. A. M. being preceded with a very loud report; and is said to have rose to such a violence, as to shake down some bricks from the tops of some chimnies, and also some pieces of stone wall. The course of this earthquake, is said, by some that remember it to have been from the westward to the eastward. As to other particulars I can find no account†.

The next earthquake that shook the whole country, was in the year 1755. November 18, N. S. at 4h. 17' 35" ‡, in a calm serene and plea-

NOTES.

* Vide Phil. Transf. No. 429; and for 1757, p. 13, and also professor Kalm's travels, vol. i. p. 44, 2d edit. London. On February 6, 1737, at 4¼ P. M. and December 7, little before eleven at night, small earthquakes were felt at Boston: but no particulars are mentioned as to their phenomena.

† Phil. Transf. for 1757, p. 14, and American Mag. for 1744.

‡ The beginning of this earthquake was determined to all the exactness that could be desired, by the following accident.—Professor Winthrop at Cambridge, some time before, having used a pretty long tube, in a particular experiment, shut it up in his clock case, for security. This tube, standing nearly perpendicular, must have been overset by the first shock, which made it impossible for the pendulum to make any oscillation, after the tube had struck against

the same night, came on the most violent shock of an earthquake that was ever known in New-England. The first thing observable, was that rumbling noise, or roar, which, as a sound, *just generis*, seemed a prelude to an earthquake. In about half a minute, the surface of the earth seemed to be suddenly raised up: and, in subsiding, was thrown into an universal trembling, or a very quick jarring vibratory motion, which acted in an horizontal direction. This motion continued for about a quarter of a minute, and then abated for three or four seconds. Then, all at once, came on a violent prodigious shock, as suddenly, to appearance, as a thunder clap breaking upon a house, and attended with a great noise. This sudden and great shock began with the same kind of motion; and was immediately succeeded by quick and violent concussions, jerks and wrenches, attended “with an undulatory, waving motion of the whole surface of the ground, not unlike the shaking and quaking of a very large bog.” After this great shock had been gradually declining and going off, near half a minute, there was a sensible revival of it, though of short continuance; and so all by degrees became still and quiet again.

The violence of this earthquake was the greatest of any we have ever had in the country, “In

NOTE.

it. The clock stopped at the time mentioned above. Being a very good one, and having been adjusted by a meridian line, the preceding noon, it must have pointed out the beginning of the earthquake to a great precision. Had the time been as accurately determined at any other distant place, the velocity of its motion might have been determined to great exactness.

Boston, besides the throwing down of glass, pewter, and other moveables in the houses, about an hundred chimnies were, in a manner, levelled with the roofs of the houses; and about fifteen hundred shattered, and thrown down in part. Some were broken off several feet below the top; and by the suddenness and violence of the jerks, canted horizontally an inch or two over, so as to stand very dangerously. Some others thus broken off, were turned round several points of the compass, as with a circular motion. The roofs of some houses were quite broken in by the fall of chimnies. The ends of about twelve or fifteen brick buildings were thrown down, from the top to the eaves of the houses. Many clocks were stopped. The vane upon the public market house was thrown down;—the wooden spindle, which supported it, being broken off at a place where it was five inches in diameter, and ten feet in height; and which had stood the most violent gusts of wind. A new vane, upon one of the churches in the town, was bent at the spindle, two or three points of the compass: and a distiller's cistern, made of plank, almost new, and very strongly put together was burst to pieces, by the agitation of the liquor in it; which was thrown out with such force, as to break down one whole side of the shed that defended the cistern from the weather; as also to stave off a board or two from a fence, at the distance of eight or ten feet from it." Much the same things were observed in the country. At Springfield, a town distant about eighty miles in a westerly line from Boston, a spindle on one of their churches, was bent to a right-angle—And through the whole province, much damage was done by the throwing down of stone fences, cellar walls, chimnies, and the like. These things may serve to

give us pretty just ideas of its violence: but it is to be observed, that the violence of the shock was different in different places; and not exactly the same in towns contiguous to one another; or indeed in all the parts of the same town.

There has been no earthquake in the country, whose duration was determined with so much accuracy as was that of this. Professor Winthrop at Cambridge, the day before, had adjusted his clock and watch by a meridian line. His clock was stopped at 4h. 11' 35". Being awakened by the earthquake, he arose, and looking upon his watch found it to be fifteen minutes after four. The jarring continued about a minute after this. The next day the watch was found to have kept time very exactly. So that the duration of the earthquake, taking in the whole of the time from the first agitation of the earth, till it became perfectly quiet, was very nearly four and an half minutes; though the violence of the shock did not last half so long. This observation of its duration at Cambridge, agreed pretty well with some of the same kind made at Boston, by gentlemen who were up, and looked upon their watches when it began and ended. In other places, its duration might be different, according to the different violence of the shock.

By the accounts of those who were in the commons and open places, when the earthquake began, the course of it was nearly from north-west to south-east. It was almost universally agreed, that the noise and shakes seemed to pass in that direction: and those things which were in such a situation as that they might have been thrown indifferently to any point of the compass, pretty generally lay in that direction.

The extent of this earthquake, was traced to a great distance. On

the south-west, it reached as far as Chesapeake-Bay in Maryland: being felt on the eastern, but not on the western side. To the north-east, it was felt as far as Halifax. It is much more difficult to determine its eastern or eastern limit. It extended to all our back settlements; was felt at Lake George, and probably many miles beyond: but at Oswego, Scituate on the south eastern shore of Lake Ontario, and distant from Boston about two hundred and fifty miles east-by-north, it was not felt at all. On the atlantic, the shock was so great, seventy leagues east of Cape Ann, that the people on board a vessel, in that longitude, thought they had run aground, or struck upon a rock, till on sounding, they found they had more than fifty fathom water. By accounts, which were soon after received from the West-Indies, it seems probable that the earthquake reached as far as those lands; or, rather, passed by to the eastward of them. The account was, That on the 18th of November, about two o'clock in the afternoon, the sea withdrew from the harbour of St. Martin's, leaving the vessels dry, and fish on the banks, where there used to be three or four fathom water: and it continued out a considerable time; so that the people retired to the high lands, fearing the consequence of its return: and when it came in, it arose six feet higher than usual, so as to overflow the low lands. There was no shock felt at the above time."

As this extraordinary motion of the sea happened about nine hours after the great shock was felt in New-England, it seems very likely to have been occasioned by the same convulsion of the earth. As this earthquake went off south-eastward into the Atlantic, it would pass considerably to the eastward of St. Martin's,

which has about 18° of north latitude, with $62\frac{1}{2}^{\circ}$ of west longitude. And this was the case at the island. There was no shock felt; but the motion of the sea was probably owing to a great agitation, raised at a considerable distance, in some part of the ocean, by the passage, or by an eruption of the earthquake, and from thence propagated to that island. And what seems to be a confirmation of this, the length of time was no greater than what seems necessary for such a purpose. We cannot, indeed, state, with great accuracy, the velocity with which the earthquake moved: but yet it is very evident from its duration, and being preceded with a roar, that its motion was not very swift: and that of the waves, raised hereby, and propagated, to the land, must have been much slower: both of which might easily take up nine hours in being propagated, and that in a circular direction, to such a distance as that of Boston and St. Martin's. The extent, therefore, of this earthquake, from south-west to north east, must have been about eight hundred miles: but from north-west to south-east, it reached at least nineteen hundred; and, perhaps, many more.

As the effects of this earthquake, great alterations were observed in the springs, wells and ponds of water: in some, the quality of the water was altered; in others, the quantity. New springs were opened; old ones dried up; the channel in many was much changed; and the water in some was observed to boil up in an unusual manner, for several days both before and after the earthquake. At Pembroke, Scituate and Lancaster, there were chasms made in the earth. At Pembroke, there were four or five of them; out of some of which, water issued, and many cart-loads of a fine, whitish and compressible sort of sand, was spew-

ed*. Nor were its effects confined to the land;—several of the seafaring men agreed in their accounts, that almost immediately after the earthquake, large numbers of fish, of different sorts, both great and small, came up to the surface of the water, some dead, and others dying. One of the fishing vessels, at that time out upon the banks, took up and brought in several quintals of these fish, which were found in large numbers, dead and dying, upon the surface of the sea.†

NOTES.

* Speaking of this sand, “By what I have heard,” says dr. Mayhew, “it was of a sulphureous nature.” It is to be regretted, that no experiments were made with it, to determine, with certainty, whether this was the case or not.

† In phenomena, of whose causes we have so little knowledge, it is best to note every circumstance, however minute, and whether it seems to have much connexion with the supposed causes or not; as we do not know but that they may be of use, when future observations come to be compared with them. For this reason, it may not be amiss to subjoin to the above account. 1. That at the time of the earthquake, there was no alteration in the atmosphere, as to its weight or temperature; the barometer and thermometer not undergoing any alteration. 2. A very great white frost was observed in the morning, much larger than had been for several years. When it was melted, professor Winthrop measured it, and found that it covered the ground $\frac{17}{1000}$ parts of an inch; which was almost double of any there had been for seven years before, and about five or six times as great as what is common in this country. The account of this earthquake is collected from professor Winthrop’s

There were several small shocks soon after this of November 18.—One in about an hour and a quarter after the first, viz. at 5h. 29'. A second, on November 22, at twenty seven minutes after eight at night. A third, on December 19, at 10 P. M. Their violence and duration was small; their course, much like that of the great shock; and the extent, such as to be pretty general felt through the country. Many others, but very small, were felt in different parts of the Massachusetts and New-Hampshire, for several months after.

In 1757, there was another earthquake; which, tho’ small, was generally felt. I cannot find any printed account of this shock, and, therefore, can only mention some general observations, which I then made. It came on July 8, N. S. about 2h. 20', P. M. I was then in an open field, surrounded with pretty high hills, from the south-west to north-east, in company with another person. The first thing we perceived was a small noise, like that of a rising wind, which seemed to be at a great distance, but swift advancing. It was half a minute before there was any shock. This I inferred, not barely from any conjecture I was then able to make, which in a state of surprise must be greatly uncertain, but from this circumstance: after hearing the noise we had enquired of each other what it could be; and as there was no shaking concluded it was not an earthquake when immediately the shock came on. The conversation I well remember and am certain it must have taken

NOTE.

lecture, and account of it in *Philos. Trans.* for 1757, art. 1. and from drs. Chauncey’s and Mayhew’s accounts of it.

half a minute, if not more. The shock itself was not of very great force; but seemed as though some whole body was swiftly rolling along under the earth, which gently raised that part of the surface, that was over it, and then left it as gently to subside. The course of this earthquake appeared, to me, to be from the south-west to the north-east.—The noise and shake seemed very plainly to come on, and go off in that direction. I might, however, be deceived by the reflexion of the sound from the adjacent hills, or from some other cause; for almost every one judged very differently of its course, that it was from north-west to south-east. This was the judgment of several men, who were working together, in a large open field, where there was nothing to deflect the sound, or mislead the judgment. It is not impossible that both might have been right in their opinion; and this, upon the whole, is an apt to think was the case: that though its general course was from north-west to south-east, yet, in particular places, it left its general course, and run out to any point of the compass, as the subterraneous veins, or channels, might lead it. From the effects of other earthquakes, particularly that of turning and twisting chimnies, &c. it seems as though this had been the case with most of the large earthquakes we have had.

On the 12th of March, 1761, there was also a small earthquake. It began about 2h. 30' in the morning. It was said to have been divided into two shocks, with a small pause between, the last of which was the greatest. The weather was moderate, like that of the preceding day, and a perfect calm rested on the land and water; the horizon all around, being covered with a whitish fog. The duration was supposed to be about half a minute. Hap-

pening in the night, and being too small to awake people in general, nothing can be collected with any certainty as to its course. Its extent however, was considerable; being felt not only in the Massachusetts, but in most of the adjoining states.

The same year, on November 1, about 8h. P. M. there was another earthquake. As usual, this was preceded with a heavy rumbling noise, which increased to a pretty loud report as it came near. There was a considerable interval of time between the roar and the shake. I endeavoured to make some computation of it by this method: just as the shock began to abate, I looked on my watch to note the time. The report I could hear for about half a minute after this. It is probable it was about as long in coming on, which would give half a minute between the noise and shake. The shock itself was of the undulatory kind: not violent, but sufficient to make the doors and windows jar and clatter. Its course was very plainly from north-west to south-east, and it was pretty generally felt thro' the state, and in New-Hampshire.

In the years 1766, 1769, and 1771, there were small earthquakes. Their courses were all, I think, from about north-west to south-east. Their durations not more than twelve or fifteen seconds; and their extent but small. Not being attended with any thing remarkable, it is not necessary to write particular accounts of them.

November 29, 1783, about 10h. 54', P. M. there was another small earthquake in New-England. Its extent was very considerable; being felt in Pennsylvania, New-Jersey, New-York, Connecticut, Rhode-Island, Massachusetts, and New-Hampshire. At Boston, there was but one shock; and that was not violent enough to be generally perceived. At Hartford and Newhaven, in

Connecticut, but one shock was perceived; but it seems to have been more considerable than at Boston. At New York, three shocks were felt, about the hours of nine, eleven, and two the next morning. At Philadelphia, they had a shock about eleven o'clock, and another the next morning, about two. At the first of these, "most of the houses were very sensibly shaken," but the other was not generally felt. Being but small in most places, and happening in the night, the course of this earthquake was not much attended to. The only remark I can find upon this, is in an account from Newhaven; in which it is said, "Its course was nearly from north to south, and it continued about one minute."

Observations and remarks on the earthquakes of New-England.

TO have a general view of the agreement and disagreement of the phenomena that have attended the earthquakes of New-England, it may be of use to make some general observations on the preceding historical account.

It seems worthy of remark, that all the earthquakes of this country, have been of the same kind. Writers on this subject, have sometimes distinguished earthquakes into two different kinds, according to the different motions of which they have consisted. In some, an horizontal, in others, a perpendicular motion has been chiefly observed. In the one, the earth seemed to move, as it were, from side to side: in the other, its motion seemed to be up and down. Both these motions have been united in the earthquakes of New-England. All, of which we have had any particular account, have come on with an undulatory motion, like that of a wave; which first rises till it comes to its

greatest height, and then subsides and in subsiding, spreads itself with an horizontal motion, all round. This has appeared, with the most sensible evidence, to be the case, in all the earthquakes I have ever felt. They have all appeared to me, to come on, as if a solid body, or a wave of earth, (if that expression may be allowed) was rolling along under the surface of the earth; which first raised that part which was over it, and then left it gradually to subside: the consequence of which was, a strong undulatory motion of the earth; which was immediately succeeded with an universal trembling, or very quick jarring vibratory motion, as though the earth was struggling to recover its former position.

Another thing observable in the earthquakes of New-England: they have all gone in much the same course. As to two or three of the earthquakes, we have no account of their course: but in all those in which it was determined, there is very great agreement. They are described as coming from about north-west, and going off about south-east. As this was the case with all whose direction was observed, we may rationally conclude that they all proceeded in pretty much the same general track; in a path from about north-west to south-east, though with many small deviations and irregularities, in particular places. This, if I do not mistake, has not been generally the case in the earthquakes of other places. The great earthquakes which have spread desolation in Sicily, Peru, and Jamaica, instead of proceeding in any regular course, are described rather as instantaneous blasts, which struck dreadfully upwards,—not proceeding in any certain track, from one country to another; but such as burst and rent

the circle of earth all around. With us, they have all proceeded in a different manner; and in a manner apparently regular;—fiercely running along, as it were, in the same way, as though a passage had been made for, or by them, from one country to another; in some places running more near, and in others, running more remote from the surface of the earth. And the distance to which some, and probably several, have run in the same course, has been extremely amazing;—nineteen hundred miles at least, and how much more we know not.

From the last remark it seems probable, that the earthquakes of this country, have had their origin at the considerable distance to the south-west of New England, and probably at much the same place. Whatever might be the case with these small shocks that have had but small extent, or wheresoever they might begin, the larger ones have been observed to come from the south-west; and they were of much the same violence at the most north-westerly settlements, as at other places in the country. The place, therefore, where they have had their origin, must have been in some part of the unknown lands which lie to the north-west of New England; and probably at some considerable distance from any of the European settlements; as there has been no account from any of them, in which they had not the same direction, coming on from the north-west. Whether the great shocks have all originated at the same place, we have no way to determine; but from the agreement of their courses and motions, it seems not an improbable supposition.

There seems to have been a particular part of the continent of North-America, which has been the seat of the earthquakes of New England,

and to which they have always been confined. To the south-west, they have several times reached as far as Maryland; but never so far as Virginia or Carolina. To the north-east, they have been bounded by Nova-Scotia; having never been felt much farther than Halifax. From the unknown lands, at the north-west, they have gone off south-east into the Atlantic: their extent this way, being greater than we are able to trace on either point of the compass. The province of Massachusetts-Bay, or rather, that part of New England which is about the latitude 43° north, where the river Merrimack empties itself into the Atlantic, has generally been the centre or place of their greatest violence. If from this place, a line be drawn north-west, it will pretty well represent the central course of the earthquakes of this country: and from this line they have extended about four hundred miles to the south-west and north-east. It is not meant to be very particular, but only general, as to these boundaries.—And the whole country, within these limits, has been repeatedly shaken—most violently about the middle, and least so towards the south-west and north-east boundaries. As far as can be gathered from the accounts, it seems probable, that most of the great shocks have reached to much the same places: the small ones, indeed, have not had such an extent; being felt only in different provinces and towns. But all the earthquakes, within the above-mentioned limits, have come from the same point, and ran in the same course: the great ones reaching to much the same extent, as though there was something to direct their motions the same way, and confine them to the same limits.

With what velocity these earthquakes moved, it is not easy to determine. In many accounts of earth-

quakes, their motion has been said to be instantaneous, like that of the electrical shock. The reverse has been the case in the earthquakes of New-England. Instead of being instantaneous, their motion has never been very swift. To compute, indeed, with accuracy, with what velocity any of them moved, we have no sufficient *data*. Had the times at which any of them begun, been carefully noted at places whose distances were known, it might have opened the way to some very curious conclusions. But all the accounts, excepting one of professor Winthrop, are too general to form any certain inferences of this kind. There is, however, one article in the accounts of the earthquakes of 1727, 1755, 1757, and 1761, from whence we may conclude, that the velocity of their motion, was considerably less than that of sound. Most of the accounts of the earthquakes of 1727 and 1755, agree, that the roar was heard at least half a minute before the shake began. The sound, therefore, that was occasioned by the approach of the earthquake, preceded the shock with a motion considerably swifter than that of the earthquake itself. Now, sound moves about thirteen miles in a minute; and the motion of this was considerably swifter than the motion of the earthquake. In the earthquakes of 1757 and 1761, the sound was also heard half a minute before the shock was felt: and as the report was much less, and therefore could not reach so far as in the larger shocks, the inference will be, that these small shocks moved with a velocity considerably less than the larger one. And, indeed, the supposition seems not improbable, that the velocity with which an earthquake moves, should bear some proportion to its violence—to the strength and force of those causes, by whose operation it is produced.

Whether there does not seem some evidence that this has been the case with us, the reader will judge for himself, from what has been observed above. If this is the case, as believe it is, future observations may determine it with much more certainty and precision, than any that have yet been made.

But although we are able to discern some appearances of agreement and similitude in those phenomena that have been mentioned, we cannot discern any in the times in which these earthquakes have happened. From their having all proceeded in the same course, one might be led to suspect, whether their causes, whatever they are, operating in the same direction, would not require nearly the same intervals of time, to gather sufficient force to produce the same effects. But nothing of this nature is apparent. The intervals of time at which they have happened, have been very different, and without an apparent regularity. Not to mention the smaller shocks, there have been five which have been distinguished by their being much larger than the rest: those, I mean, of 1638, 1658, 1663, 1727, and 1755. Between the two former of these, there was an interval of twenty-eight years.—Between the two next, an interval of five years: then one of sixty-four and between the two last, of twenty years. At a medium, this will make one in about twenty-seven years. But in these different intervals, there is no apparent order, regularity, or proportion, in the times of their happening. Neither does there seem to be any proportion between the interval of time, and the violence of the shock. One would be apt to imagine, that the longer the causes were gathering strength, the greater would be the violence of the earthquake when it came: and yet that of 1755, was greater than that of 1727, though

The interval of time had not been itself so long. It is to be observed, however, that as our accounts of the earthquakes are but imperfect, as to their number, and much more so as to the degree of their violence, all our reasonings, upon this article, must be very uncertain. Nor could we, without very accurate accounts of the time and violence of the earthquakes—the smaller ones as well as the greater—state any proportion between the times and the shocks, supposing such proportions to exist. But if there be any such proportions, or any order and regularity, in their periods, it is not apparent; indeed rather the contrary, from all the accounts I have been able to collect.

It is also worthy of remark, that these earthquakes do not seem to have any connexion with any thing that falls under our observation. It has been suspected, by those who account for the origin of earthquakes on the principles of electricity, and by many others, that there is some connexion between the state of the weather, or rather atmosphere, and the happening of an earthquake. As our knowledge of this subject is so imperfect, it may not be amiss to note every thing of this kind. And it is observable, that the earthquakes have generally happened in calm, serene, and pleasant weather. Some of the accounts are very imperfect in this respect: yet, in general, they seem to agree pretty much in this particular. But though it has generally been the case, that the earthquakes have come on in fair and pleasant weather, it has not been universally so. In the earthquake, which happened November 22, 1755, after the great shock on the 18th, the weather was not clear and fair, but dull, and cloudy, and attended with small showers, and a brisk gale at south-west. And in
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March, 1771, there was a small shock, when, instead of the weather being fair, there was a heavy storm of snow. But perhaps it is of no great consequence to mention this. It has been more common for writers on this subject, to attempt to find some preceding signs, or forerunners, of these events. And in this respect, fear and superstition have been abundantly fruitful. Philosophy has nothing to do with the many idle reports of this kind, which have prevailed among the vulgar. But among the many things which have been supposed to exist, there is one which deserves our notice, as having probably a real foundation in nature. Ancient and modern writers have supposed, that it might in some cases be a prelude to an earthquake, when the water in deep pits, wells, caverns, springs, &c. is thrown into uncommon motions, disturbed, altered and changed, as to its course, kind, or quality. It is rational to suppose, that such events may, in some cases, proceed from those causes, which, in a little time, have burst out, and rent the adjacent country. Some curious observations of this kind were mentioned by messieurs Dudley and Allin, as happening a few days before the earthquake of 1727: and something of the same kind was observed previous to the earthquake of 1755. As these accounts have been mentioned*, it is unnecessary to repeat them here. I am far from supposing, that any certain prediction of earthquakes can be generally made from such observations; as such events may, and no doubt do, happen, without being followed by any shocks; and earthquakes often take place without any such events. But at the same time it can hardly be doubted that the

NOTE.

* Vide p. 293 and 296.

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alterations observed in the water of these wells, were owing to the operation of the same causes, which in a few days burst forth with such violence as to shake all New England. With regard to the ill effects, which have succeeded earthquakes in some countries, it is well known there have been many and fearful accounts. In some places they are said to have been followed by great mortality, pestilential disorders, and the most raging sickness. Nor is it improbable that the air should be infected with noxious effluvia, from the vapours which were before confined, and perhaps corrupted. It seems credible, that something of this nature has been the cause, and probably, the consequence of earthquakes, in some places. Many of these reports, indeed, seem to be much like what has been said of the effects of comets, meteors, and the conjunctions of the planets. But at the same time it seems probable, both from ancient and modern accounts, that in some places, pestilential disorders have, in fact, and probably as the consequence, succeeded great earthquakes. Nothing of this nature has been the case in New England. It is, however, highly probable from the rev. mr. Lowel's observation*, that some very noxious vapour or effluvia, attended the eruption of the earthquake of 1727: but no bad effects, no pestilential distempers, no sweeping sickness, or uncommon disorder, or mortality, have been observed to succeed any of the earthquakes of this country; no otherwise, at least, than what has been common at other times.

NOTE.

* Vide p. 295.

(Conjectures on the causes of these earthquakes will appear in our next.)

Theory of water-spouts, by Andrew Oliver, esquire, of Salem, in the state of Massachusetts.

MY last essay† contained a theory of lightning and thunder storms, which was suggested to my mind upon the perusal of doctor Priestley's history of electricity. In the investigation of which theory, while I was endeavouring to account for the exhibitions of those phenomena upon the ocean, at great distance from the land, some thoughts naturally occurred, relative to the water spout—a phenomenon as curious perhaps as any one in nature, and which can rarely take place but at sea.

Water-spouts have by some been supposed to be merely electrical in their origin; particularly by signior Beccaria, (Priestley's hist. of elect. p. 355, 356) who seems to have supported his hypothesis by some experiments. But as several successive phenomena are necessary to constitute a complete water-spout, (some of which undoubtedly depend upon the electric principle) if we attend to the most authentic descriptions of these spouts, through their various stages, from their first exhibition to their total dissipation, we shall be obliged to have recourse to some other principle, in order to obtain a complete solution. I shall, therefore, first describe these phenomena according to the best observations I have met with; and then, endeavour to give a general philosophical solution of them. But I must here observe, that the following descriptions are all taken from the accounts of mariners, who are indeed the only persons who have opportunities of viewing them; but, unfortunately for the cause of philosophy, do not usually observe

NOTE.

† See page 226.

hem with that circumstantial accuracy, respecting the previous and subsequent states of the atmosphere, which may be necessary to found a complete physical solution upon, nor with any view to that end; as it is foreign to their main business, trade and commerce. But as such accounts are the best I have met with even in the transactions of the royal society down to 1744, lower than which I have not seen them; from such I shall endeavour to draw the best conclusion which the nature of the evidence will justify.

The most intelligent and beautiful account of a water spout, that I ever met with, is in the abridgment of the Phil. Trans. vol. viii, by Martin, pa. 655, as it was observed by Mr. Joseph Harris, May 21, 1732, about sunset, lat. $32^{\circ} 30' N.$ long. $9^{\circ} E.$ from Cape Florida: which I shall here transcribe.

“ When first we saw the spout it was whole and entire, and much of the shape and proportion of a speaking trumpet; the small end being downwards, and reaching to the sea, and the big end terminated in a black, thick cloud. The spout itself was very black, and the more so, the higher up. It seemed to be exactly perpendicular to the horizon, and its sides perfectly smooth, without the least ruggedness. Where it fell, the spray of the sea rose to a considerable height, which made somewhat the appearance of a great smoke. From the first time we saw it, it continued whole about a minute—and, till it was quite dissipated, about three minutes. It began to waste from below, and so gradually up, while the upper part remained entire, without any visible alteration, till at last it ended in the black cloud above. Upon which there seemed to fall a very heavy rain in the neighbour-

“ hood. There was but little wind, “ and the sky elsewhere was pretty “ serene.”

In other accounts, contained in the philosophical transactions, these phenomena are described as having the appearance of a sword pointing downwards, sometimes perpendicularly, sometimes obliquely, towards a column of water or froth, which seems to rise out of the sea to meet it, attended with a violent ebullition or perturbation at the surface. Again, in others the appearance is compared to smoke ascending visibly as through the funnel of a chimney, either directly, or with a spiral motion, which, according to the fancies of some, resembles the ascent of water in the screw of Archimedes; by supposing something similar to which in the atmosphere, they have endeavoured to account for the rise of the water from the sea in a water-spout. To which I would add, that, from the relations of some persons who use the sea, with whom I have conversed upon the subject, I find that it is no uncommon thing, during a calm below, and a serene sky above, to observe at the distance of two or three leagues, a small cloud hovering in the air, from whence the commencing spout seems to dart downward to the sea, upon which the usual phenomena take place in their order. I have also been informed (and to information I must trust, having never been at sea) that it is common, during these appearances, for ships to sail, even within hail of each other, with different winds; and within the limits of the same visible horizon, with contrary winds: and lastly, that the rise and progress of this phenomenon is sometimes so rapid, that, even in a serene sky, a few minutes will be sufficient to generate a cloud from one of these spouts, and to discharge from thence a heavy shower of rain.

Before I proceed to attempt a philosophical solution of these curious productions of nature, in which the two principal fluids of our globe, air and water, are largely concerned; it may be necessary to make some observations upon the nature and properties of fluids in general, as such.

1. No fluid can be at rest unless every part of it respectively be acted upon by an equal force or pressure in every direction: till then its several parts will necessarily recede from the greater pressure towards the lesser; nor can an equilibrium take place.

2. If two or more fluids of different natures and densities come together, such as quicksilver, water, oil, and air, which will not mix; they will take their places according to their specific gravities, the most dense remaining at the bottom.

3. If a vessel be filled with either of these fluids, and a denser one be admitted into it, the latter will expel and take place of the former.

4. If an empty cylindrical space be surrounded on all sides by a fluid, which is excluded by some resisting surface terminating that space, the fluid will necessarily, upon the sudden removal of the obstacle, immediately flow in from every side towards the centre of the void: and as it flows inwards, the parts, next surrounding this space, will thereby be crowded together, and force each other upwards, till at length, when closed, the fluid will, by its ascent, have formed a column directly over the middle of the space, to a height proportionable to the united force of the converging currents. This must be the case with every fluid thus flowing into a vacuum; and in a lesser degree, when a denser fluid, in a similar situation, supplants a rarer: and the greater the difference of the densities of the two fluids might be, the more conspicuous would be the effect.

This reasoning may be illustrated and the conclusions exemplified, by facts which must have occurred to the observation of every one. Do we not observe, when a shower of hail, or rain in large drops, falls upon the surface of stagnant water, that the water rises, wherever they fall like so many little inverted icicles which again instantly subside? the cause of which undoubtedly is, that these drops, or hail-stones, descending from a great height in the atmosphere, acquire severally such a momentum in their fall, as to plunge through the surface to a proportionable depth, driving the superficial water back on every side, and leaving momentary vacuum behind them: not indeed a pure vacuum, but such relative to the surrounding fluid which immediately returns to fill the chasm, and as it closes, gathers and rises in the little columns above described. When a large round stone, or any other heavy body plunges, the effect is proportionably greater.

5. Let us, for argument's sake suppose the atmosphere over any certain circular tract of ocean, of some miles in diameter, to be for a moment annihilated, the space it occupied before being reduced to a pure vacuum—the surrounding atmosphere, when at liberty, would rush in from every quarter towards the centre, where the converging currents would immensely crowd each other, and force up a vast quantity of air through a very narrow funnel contracted below by the united pressure of those currents from all sides into the higher regions; which funnel, as the density of the air lessens according to its height, and the surrounding pressure which contracts must decrease nearly in the same proportion, would more and more diverge and expand, the higher it rose above the surface of the sea. The

ould be attended with a most furious blast of wind up to, and far above the top of the atmosphere. In like manner,

6. If instead of a pure vacuum, or a total annihilation of such part of the atmosphere, we suppose the same to become, by any means whatever, specifically lighter than the surrounding regions, the effect would be the same as above, in kind, though not in degree; the denser air flowing in, but with less rapidity, from all quarters without, expelling the lighter, and supplying its place, as in article four; upon which also a large quantity of this confluent air, for the same reason, would be driven up with violence through a like narrow vent, yet not with the same impetuosity nor to the same height, as if forced through a funnel into a pure vacuum.

That the atmosphere, over large tracts of sea or land, may thus become specifically lighter than that over the surrounding regions, will be evident, if we consider, 1. That heat has a natural tendency to rarefy and expand the air upon which it acts. 2. That the atmosphere, over our heads, does not consist of mere elementary air, but is an universal receptacle of all the heterogeneous vapours and effluvia which are perpetually exhaling from every substance which exists upon the face of the earth, whether animal, vegetable, or mineral. 3. That, by the casual disposition of these vapours and effluvia in the atmosphere, the air, which is, of itself, naturally enough disposed to acquire heat from the passage of the sun's rays through it, may become more disposed to imbibe and retain that heat, in one region, than in another in its neighbourhood; which, from the intervention of clouds, or from its purity and freedom from those steams and vapours with which the former is charged, may, in a

great degree, retain its natural coolness and density, while the other becomes heated, rarefied, and expanded, and is thereby rendered specifically lighter.

That these different affections of the atmosphere actually take place, and dispose the air, at one time and in one place, even in the same seasons of the year, to imbibe and retain the heat excited by the sun's rays, more than at another, is not a matter of mere conjecture: but, whatever the cause may be, is notorious to all persons of observation.

These things being premised, I beg leave to observe further, that some parts of the ocean are liable to long and extensive calms, during the continuance of which the heat is scarcely tolerable. Where these take place, the air must necessarily undergo proportional changes in its density and electric capacity*; and, when heated and rarefied to some certain degree, will give way, as observed above, to the denser air, now proportionably disposed to flow in from all quarters without the limits of the calm.

When once this stagnated air, especially if of any great extent, becomes specifically lighter than the surrounding air, and sufficiently rare to be supplanted by it—the latter will, of course, set in from every side in horizontal currents; which will flow, either directly or obliquely, towards one point, in or near the centre of the becalmed region afore-said: the obliquities of which currents will depend upon the directions and velocities of the winds, or currents of air, which might previously have taken place in the surrounding regions. When these currents arrive

NOTE.

See theory of lightning, &c. page 230.

at the centre of their mutual convergency, all the stagnated and rarefied air, which was before incumbent upon the calm surface of the sea, will have been expelled and forced higher up into the atmosphere; upon which these currents, by their mutual concurrence in one place, will excessively crowd each other, as observed above, wherever it happens, driving the central air upwards with a violent blast; which, should the currents set in obliquely, and so converge with a spiral motion, towards the centre of their mutual concurrence, would ascend as through the screw of Archimedes, or the worm of a cork-screw, to both of which navigators have likened these spouts: otherwise, it would rise through a strait, narrow funnel, as in articles five and six above; which, if filled with any opaque matter, would become visible; and, at a distance, would resemble a speaking trumpet, with the small end downwards, in which form the water-spout frequently appears. In the former cases a whirlwind round about the centre, would undoubtedly be the consequence: and in either, a water-spout would probably be produced*. For the pressure of the atmosphere is taken off from that part of the surface of the sea, which is directly under the funnel through which the air is driven up: whereas the surrounding surface is at the same time uncommonly pressed, from the confluence of the currents from all quarters†; whereby the water must

NOTE.

* We shall in the sequel see abundant reason to conclude with doctor Franklin and others, that water-spouts at sea, and whirlwinds on the land, (some species of them at least) are produced by the same causes.

† In the abridgment of the philosophical transactions, vol. II. (by Eames

necessarily be forced up to a certain height proportional to the surrounding pressure, through the same funnel with the air itself: nor is this all for in their ascent, the air and water become confusedly mixed together whereby the latter is broken and attenuated into the finest globules or particles, as when one forcibly blows water out of his mouth: and from this mixture of the two fluids doubtless arises that opacity which renders the spout visible.

This opaque column of air and water, together with the passage through which it ascends, will expand as it rises, in proportion as the compression diminishes; and, to spectators at too great a distance to discern the narrow stem next the water will resemble a sword, or acute cone pointing downwards from a small cloud; to which they are frequently likened. But that they do at the same time communicate with the sea is evident from the perturbation of the water directly under them which sometimes boils and foams at a great rate. This is usually the first appearance of one of these spouts the duration of which is either longer or shorter, and the subsequent phenomena more or less considerable, according to the extent of the cause, and the mode of its operation.

The water being thus raised from

NOTE.

and Martin) page 61, at the bottom, it appears, that the meeting of two contrary currents of air or contrary winds, raises the mercury in the barometer near the place where it happens, which indicates an increase of the pressure of the atmosphere upon the surface of the earth or sea. How much more then must that pressure be increased, from a general confluence of the air from all quarters towards one spot?

sea, and forced irresistably upwards in the finest globules by the protruding air, arrives at length at warm electrical air* lately expelled, which was previously incumbent on the calm surface beneath; the electric attraction of which probably stops the further ascent of these particles after the first fury of the blast spent. There it undergoes another operation, being converted into vapour, whereby it is wholly discharged of the marine salts it carried up with it; which are now left to rest for themselves, together with innumerable other heterogeneous particles, which successively float in the atmosphere, and which, in due time, become severally subservient to many wise purposes in the economy of nature. These vapours are then be greedily attached by craving particles of this air, deficient of its natural quantity of electric matter†, and form a dense cloud, in like manner as thunder clouds are formed over the land—but in much greater expedition, as the supply of vapours is more sudden. This cloud will then be ready, in a short time, to discharge a shower of water upon the sea, from whence it rose, and may be attended with thunder and lightning, or not, as the air in which the cloud was formed, was more or less electrical, or the cloud extensive.

NOTES.

See theory of lightning, &c. page 2.

The water, carried up in one of the spouts, is undoubtedly salt, when it first rises from the sea, as it ascends in great quantities, and in a very dense column: but it is always fresh when it descends again in a shower: it must therefore, in the mean time, have gone through a complete natural distillation.

*Theory of lightning, &c. page 2.

A previous calm may not be necessary to the production of these phenomena: and indeed they frequently happen without one: but, upon the same principle, if it be calmer where they are produced, or the state of the atmosphere there be such as to dispose it to acquire and retain the heat acquired from the sun's rays, more than in the surrounding regions, which, as we have seen above, may be the case, the effects may be the same in kind, though perhaps not in degree; the most perfect water-spouts probably rising from whence there has previously been a dead calm, or nearly, such for the foregoing reasons.

If there be any wind at the time of the phenomena, the aerial funnel, through which the water ascends, instead of being perpendicular to the horizon, as it would be in a calm, might incline more or less to it, in proportion to the strength or weakness of the prevailing current of air: or, instead of continuing in one spot, it might have a progressive motion over the surface of the sea, in the direction of the general current; both of which circumstances frequently take place. In either case, it is natural to suppose, that both air and water would ascend spirally, as through the worm of a screw, every current, which sets in towards the centre, receiving an oblique bias from the prevailing current.

It sometimes happens, that after the subsiding of a spout, it is succeeded by a second, and that by a third, either in the same place or at no great distance from it. But this also is analogous to what we observe upon the plunging of heavy bodies out of air into water. For, after the first subsiding of the small column of water, which is occasioned by it, and is above resembled to an icicle, the water again rises and subsides as at first, though not in the same degree; as may be concluded from those

fainter concentric circles which expand from the same centre, after the subsidence of the first column. The same thing which here takes place in water, may also take place in air, under similar circumstances.

Since writing the foregoing, while I was endeavouring to contrive some experiment to illustrate the subject, a very simple one was suggested to my mind, the success of which I think demonstrates the truth of the hypothesis introduced above, to account for the first ascent of the water in the spout; the event being precisely the same as was expected before hand, and as ought to have taken place, upon the principles above advanced.

EXPERIMENT.

In a stiff paper card, I made a hole just big enough to insert a goose quill, so as that it might be fixed perpendicularly to the plane of the card: after cutting the quill off square at both ends, and fixing it, I laid the card upon the mouth of a wine glass, filled with water, to within one fifth or sixth part of an inch from the lower orifice of the quill: then applying my mouth to the upper part, I drew out the air in the quill by a strong suction; and in one draught of my breath drew in about a spoonful of the water: this by stronger suctions I was able to repeat again and again, the quill remaining as before. The water, as I expected, did not ascend to the mouth in a stream, as it would have done, had the quill reached below the surface; but broken and confusedly mixed with the air which ascended with it: as is above supposed to be the case in the ascent of water in a spout at sea.

In this experiment, the suction occasioned a vacuum, or at least a great rarefaction of the air, within and directly under the quill: the surrounding air of course flowed in from every

quarter to supply it, rushing up into the quill, and through it to the mouth: the pressure of the atmosphere being thereby taken off from the surface of the water immediate under the orifice, while the pressure upon the surrounding surface remained, and was probably increased, the water was forced up, together with the air as above, notwithstanding the quill had no manner of communication with the water. If the suction be made very strong, and the quill be fixed at the distance of a quarter of an inch or more from the water, a considerable agitation and ebullition takes place in the water under it, similar to that observed in most natural water-spouts, at the passage of the water, from the surface to the quill, becomes very visible.

It was hinted, in the preceding note, that water-spouts at sea, and whirlwinds at land—some species of them at least—arise from the same cause, how different soever their apparent effects may be. This I think is made sufficiently evident from observations of a couple of late spouts at Hatfield, in Yorkshire, Mr. Abraham de la Pryme*, who has accounts of them I shall here transcribe, as the transactions of the Royal Society are in the hands of but few among us, and the facts related by him tend strongly to confirm the preceding theory, however his conclusions from them may differ from it.

“ On the 15th of August, 1681,
“ appeared a spout in the air, at Hatfield, in Yorkshire: it was about
“ a mile off, coming directly to the
“ place where I was. I took my perspective glasses to observe it as well
“ as I could.

NOTE.

* Abridgment of philosophical transactions, vol. IV. by Jones, p. 106, 107.

“ The season was very dry, the weather extremely hot; and the air very cloudy; the wind aloft, and pretty strong; and (which is remarkable) blowing out of several quarters at the same time, and filling the air hereabouts with mighty thick and black clouds, layer upon layer; the wind thus blowing soon created a great vortex, gyration and whirling among the clouds; the centre of which every now and then dropt down in the shape of a thick, long, black pipe, commonly called a spout; in which I could distinctly view a motion like that of a screw, continually drawing upwards, and screwing up (as it were) whatever it touched. In its progress, it moved slowly over a hedge-row and grove of young trees, which it made to bend like hazle wands, in a circular motion; then going forward to a great barn, it twitched off in a minute all the thatch, and filled the whole air therewith. Coming to a very great oak tree, it made it bend like the foregoing trees, and broke off one of the greatest and strongest branches, that would not yield to its fury, and twisting it about, flung it to a very considerable distance off; then coming to the place where I stood, within three hundred yards of me, I beheld this odd phenomenon, and found that it proceeded from nothing but a gyration of the clouds by contrary winds meeting in a point or centre; and where the greatest condensation and gravitation was, falling down into a pipe or great tube (something like the *cochlea Archimedis*) and that in its working or whirling motion, either sucks up water, or destroys ships, &c. Having travelled about a quarter of a mile farther, it dissolved by the prevalency of the wind that came out of the east.”

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The account of the other is as follows, viz. “ I have seen another spout in the same place, which very much confirms me in my notion of the origin and nature of them.—The 21st of June, 1702, was pretty warm; on the afternoon of which day, about two of the clock, no wind stirring below, though it was somewhat great in the air, the clouds began to be mightily agitated and driven together; whereupon they became very black, and were (most visibly) hurried round, from whence proceeded a most audible whirling noise, like that commonly heard in a mill. After a while, a long tube or spout came down from the centre of the congregated clouds, in which was a swift spiral motion, like that of a screw, or the *cochlea Archimedis*, when it is in motion, by which spiral nature and swift turning, water ascends up into the one as well as into the other. It travelled slowly from west to north-east, broke down a great oak tree or two, frightened some out of the fields, and made others lie down flat upon their bellies, to save being whirled about and killed by it, as they saw many jackdaws to be, that were suddenly caught up, carried out of sight, and then cast a great way amongst the corn; at last it passed over the town of Hatfield, to the great terror of the inhabitants, filling the whole air with the thatch that it plucked off from some of the houses; then touching upon a corner of the church, it tore up several sheets of lead, and rolled them strangely together; soon after which it dissolved and vanished without doing any further mischief.

“ By all the observations that I could make of this, and the former, I found that had they been at sea, and joined to the surface there-
D

“ of, they would have carried a
 “ vast quantity of water up into the
 “ clouds, and the tubes would then
 “ have become much more strong
 “ and opaque than they were, and
 “ have continued much longer.

“ It is commonly said, that at sea
 “ the water collects and bubbles
 “ up a foot or two high under these
 “ spouts, before that they be joined :
 “ but the mistake lies in the pelluci-
 “ dity and fineness of those pipes,
 “ which do most certainly touch the
 “ surface of the sea before that any
 “ considerable motion be made in it,
 “ and that, when the pipe begins to
 “ fill with water, it then becomes
 “ opaque and visible.”

I shall here make a remark or two upon the above-cited author's mode of expression in the foregoing accounts, which is evidently adapted to a preconceived idea of the *cochlea Archimedis*, by supposing something similar to which, as taking place in our atmosphere, he is not alone in endeavouring to account for these phenomena. In conformity to this idea, he speaks of the spout as drawing upwards, and screwing up whatever it touched; and supposes that by its spiral motion and swift turning, water ascends in it as in the screw of *Archimedes*. But this hypothesis, however specious, has been long since exploded as unphilosophical.

Mr. de la Pryme mentions the appearance of a long black pipe, which now and then dropped down from the centre of the gyrating clouds; in which pipe he distinctly viewed a motion like that of a screw; and as such he seems to have supposed it acted, viz. either in the manner of a cork-screw upon solids, or as the *cochlea Archimedis* upon fluids, drawing them up into the atmosphere. But as he himself afterwards, when applying his observations to a spout at sea, very justly concludes

that the pellucidity and fineness these pipes over the water, render them invisible below, “ notwithstanding (as he conceives) that the pipes do most certainly touch the surface of the sea before any considerable motion be made in it, and that they are then rendered opaque and visible when they begin to touch with water;” might he not with equal reason have supposed that the aerial pipes, which he observed over the land, were also continued from the clouds down to the surface of the earth, as from their effects below one would naturally conclude them to be, and that they were pellucid and invisible so long as they contain nothing but air; but that, “ even now and then,” when they mix with any substances which might perchance pass within the compass of their gyration, or which they could easily carry up; such as detached parts of the broken clouds; water from stagnant ponds, brooks and rivers; hay, stubble, thatch, dust, &c. they then became opaque and visible, and that they appeared to dart downwards by a kind of optical deception; and upon the foregoing principles, the pipes of air must necessarily be broadest above, as we have already seen, and terminate in a narrow state below, the broadest part being, at a distance, first visible, and the slenderly tapering downwards to a point. It is, however, certain, from the effects of the abovementioned spouts, that, whatever the appearances were aloft, they were all occasioned by the rushing of the air upwards through a narrow passage, that was contracted below, by the counter course and pressure of the opposite currents of that fluid, and dilated above from the diminution of the pressure.

I have reserved for this place an account of a curious spout which made its appearance anno 1694, 1

sea, but in the harbour of Top-
 am*, and at low water, which
 passed with a slow progressive motion
 over both land and water; acting as
 a complete water spout over the lat-
 er, and as a whirlwind upon the
 former: for when it passed over the
 channel of the river, it threw up
 the water in a dense stream, as if it
 had been impelled through the hose
 of a fire engine, and the stream ac-
 cordingly ended in a thick mist, re-
 sembling a dark smoke; the surface
 of the water, round about the spot
 from whence it rose, being greatly
 agitated, as is usual in those pheno-
 mena. In its course, it met with the
 hull of a new ship, of about one
 hundred tons, which was much
 shaken by it, but received no hurt.
 passing over the flats, it took hold
 of a boat which was fastened to an
 anchor, twirled both boat and an-
 chor to some height in the air, and
 sent the boat "from the head to the
 keel." When it reached the shore,
 it lifted up another boat about six
 feet from the ground, letting it fall
 again upside down; and had a
 strange effect upon a parcel of planks,
 some of which were raised up per-
 pendicularly, and stood upon their
 ends while it passed along. In
 its further progress, it was attended
 with the usual effects of a whirlwind,
 such as stripping off, not only thatch,
 but sheets of lead from the tops of
 houses, and tearing off the limbs of
 trees. This account may tend to
 confirm the theory here offered, as it
 proves to a demonstration, that the
 water-spout therein described, was oc-
 casioned by a previous whirlwind in
 the atmosphere; which whirlwind
 was also occasioned by the rushing of
 a large quantity of air upwards, from

all quarters near the surface of the
 earth, through a very contracted
 aerial passage, towards the top of the
 atmosphere. The narrowness of the
 passage, as determinable from the ef-
 fects observed in its progress, shews
 it to have been compressed upon all
 sides by a general conflux of oppo-
 site currents of air; as the rushing of
 the air through it with such violence
 from beneath, does, that the density
 of the fluid, and the compressive force
 of the currents, were greatest there.
 The ascending air carried up the wa-
 ter with it through the same passage;
 not by any mechanical operation up-
 on it, like the action of a screw of an-
 ny kind; but, merely, by taking off
 the pressure of the atmosphere from
 the surface of the water directly un-
 der it; whence the water must neces-
 sarily ascend, as in any common hy-
 draulic machine; and that with a
 force proportional to the pressure of
 the atmosphere upon the surrounding
 surface, now greatly increased by the
 confluence of those currents.

Before I close this subject, I shall
 just mention, without making any
 remarks, the effects which a whirl-
 wind had amongst a number of
 shocks of corn at Warrington, in
 Northamptonshire, August the first,
 1694: out of which from eighty to
 a hundred shocks were carried up in-
 to the air, a great part of them out
 of sight. These, when the fury of the
 blast was spent, fell down again at
 the distance of some miles from their
 own field. The account of this
 whirlwind immediately precedes the
 article last quoted from the philoso-
 phical transactions. Should the
 foregoing theory be adjudged tena-
 ble, it will render very credible
 those strange accounts which we
 have sometimes had, of its raining
 tadpoles and frogs, which have been
 found upon the tops of houses after
 a shower; and even small fishes, a
 shower of which fell at Cranstead,

NOTE.

* Lowthorp's Abridgm. Phil.
 trans. vol. II. page 104.

near Wrotham in Kent, anno 1696, on the Wednesday before easter (Lowthorp's abridgment of philosophical transactions, vol. II. page 144.) For should one of those aerial pipes pass over a frog pond, or the shallow parts of a fish pond, the same natural cause, which in a spout at sea, would carry up the water from the ocean, would also carry up the water from the ponds aforesaid, together with the contents; whether tadpoles, frogs or fishes. These must descend again somewhere; and wherever they fell, a shower of fishes, frogs, or tadpoles, would be the consequence.



A sketch of the climate, water, and soil in South Carolina, by Lionel Chalmers, M.D. of Charleston, South Carolina; written anno 1776.

THE province of South Carolina comprehends that extent of territory, which lies between the 35th and 31st degree 45 minutes of north latitude; stretching along the Atlantic ocean, north east by north, and south west by south, nearly.

The coast of this country is so low and flat, that it cannot be seen at the distance of more than seven leagues: but, about fifty miles from the shore, the land becomes more unequal, and consists of spacious levels, interspersed with easy risings; which, gradually advancing in height towards the west, terminate in a range of lofty mountains, that form, as it were, a chain which runs throughout the continent of North America, at the distance of about three hundred miles from the sea coast.

From the east side of these mountains, many rivers arise, and run in very winding courses, to discharge themselves into the ocean: and as the waters of all the adjacent lands

fall into them, these rivers are liable to excessive inundations; swelling sometimes, more than twenty feet perpendicular height, in the short space of twelve hours; particularly in those places where the channels are narrow, and the banks sufficiently high to confine the waters. But where the land is lower, the waters spread themselves many miles beyond their ordinary limits; whereby cattle and all other land animals, that cannot reach the high grounds, are destroyed; and thus the low lands may continue deluged for many weeks. These land floods are owing either to the melting of snow in the mountains, or the falling of heavy rain in the interior parts of the country and they sometimes happen, both in the spring and autumn, but most frequently in the latter season: and some years the rivers do not swell at all; or this may be in so small a degree, as not to do any damage. When such inundations happen in the spring, the planters cannot sow their grain; and in the autumn, the produce of their lands is either swept away by the stream, or so rotted, that little or nothing can be reaped for that year. However, so prolific are those lands, that if one crop is lost out of three, the planters are sufficiently recompensed, so great is the increase, which is yielded by those places that had thus been repeatedly overflowed, from the vast depth of fine rich mould, that has been deposited on them in a long course of time; so that their fertility is inexhaustible.

Some gentlemen, who own lands of this sort, have assured me, that they can thrust a reed, twenty feet long, quite down; the whole of which depth consists of a rich mellow earth. In order to prepare such lands for planting, dams or banks of earth are made, to prevent the waters from overflowing them; by which

ans the surface soon becomes dry
l fit for cultivation, with what-
er grain they choose—if it be with
e, cross dams also are made
oughout the field, so as to inclose
e or more acres within each
are; and at the bottoms of these
nks, hollow trunks of wood are
ced, having a valve at each end,
which means the spring tides
eing fresh water) can either be let
or kept out at pleasure, as well as
ained on the whole or any part
the field when it is admitted, and
rice requires it; for this is pro-
ly a water plant; at least when
a proper age, it thrives best in
ter.—Besides, another great ad-
vantage arises from this manner of
erflowing those fields; which is,
t thereby not only most sorts of
ss and weeds are destroyed; but
ious insects also, which are per-
ious to the young rice, are like-
se drowned thereby. On the other
id, this preventive of the above
onveniencies, is often productive
another equally mischievous; for
h multitudes of craw fishes breed
the water, that amazing quantities
rice are cut down by them—nor
the plants that have thus been cut
ever send out new shoots from
ir roots: so that it is not uncom-
n to see the surface of the water
ered with young rice that has been
destroyed. It is true, that to pre-
e a field, perhaps of several hun-
ed acres, by making so many dams,
work of much time and labour;
t when once it is done, it will
nd for many years, requiring only
ne repairs now and then; and thus
planters cannot fail in having
ge crops, barring such accidents
we have mentioned; the common
eaise from good land being about
hty bushels of rough rice per acre,
hich, when beat out and cleaned,
l yield two thousand pounds
ght, or four barrels fit for market;

besides a considerable quantity of
small broken rice, which negroes
eat.—Notice was taken above, of
spring tides in the fresh water rivers,
the reason of which should be ex-
plained—these are owing to the
greater influx which the sea makes
for three days before, and as many
after every change and full of the
moon; so that they hold for the
space of six days every fortnight.
For, at such times, the sea flowing
in with a stronger current, and rising
some feet higher in the rivers so far
as the tide flows,—this more rapid
influx checks the course of the wa-
ters in the rivers, which tend natu-
rally towards the ocean, and causes
them to swell and overflow the low
lands above.

But besides the principal rivers
spoken of above, there are many
others of less extent, which arise
from low, springy or marshy lands,
and, as they branch out far and wide,
innumerable navigable creeks are eve-
ry way formed throughout the coun-
try: an easy water carriage is there-
by given from one place to another;
a great conveniency this, which no
province is more favoured with than
South Carolina. All these rivers dis-
charge such quantities of muddy wa-
ter into the sea, that when ships come
into soundings, at the distance of
fifteen or twenty leagues from the
shore, the water, from having been
of a transparent azure colour, now
appears thick, as containing many
earthy particles. One thing worthy
of remark is, that all our rivers (and
I suppose it to be so every where)
have what are called bars, where
they disembody themselves into the
sea. So that according to the quan-
tity of water they discharge, and
the rapidity with which this is done,
these bars lie nearer to or farther from
the shore. By bars are meant banks
of sand, on which the water is shal-
lower than in other parts—these are

formed by what are called counter-tides. For as the waters in all rivers, are ultimately discharged in the sea, and before they empty themselves into it, their rapidity is greatest on the tide of ebb; and as the waters of rivers always abound with sandy and earthy particles, and a pause happens between low water and the first of the flood, as well as between high-water and the ebb, the grosser parts then have time to subside; but as the sea also, by its superior pressure, on its influx of flood, soon overcomes the force with which the waters in rivers tend downwards, and it likewise, by the swiftness of its flowing, brings along with it much sand, broken shells, &c. whatever was before deposited on such places, is likewise added to, this way.

Along the banks of every river, lies much low land, which is mostly covered at high water, so far as the tide flows: and when this ebbs away, a nauseous smell exhales from these marshes, owing to the many dead shell fish, &c. that lie rotting promiscuously in the deep slimy ouze, as well as from the latter itself; which, perhaps for many ages, hath continued in a stagnated and undisturbed state. So far as the sea water flows, these banks are covered with a high and strong sedgy sort of grass, of the wild oat kind—and at a greater distance from the sea, where the waters are always fresh, such swampy lands abound, not only with grass of nearly the same sort, as well as reeds, but also with a vast variety of other productions, from the lofty cypress down to the most humble plant. Besides these wet lands, in the interior parts of the country, are several fresh water lakes (but of no great extent) and great quantities of low level soil, which, after heavy rain, continue long overflowed, as not having sufficient declivities, by which the waters might run off.

In almost every settlement, much land is designedly overflowed, stopping the water courses with strong banks of earth; where reservoirs of a good depth and extent are formed, in order to be let into the rice fields, when the plant is at a fit growth for receiving the water for extracting the dye from the plant which yields indigo; or for mills of various sorts. And, whenever these collections of water are expended for the above purposes, or they are dried by the sun, or swept away by winds, such multitudes of fish; reptiles of various kinds perish, that for a long time after, the air is tainted with the putrid effluvia that arise well from the numberless bodies of animals, which are in the high state of putrefaction, as the mud and soil. But these pools are dangerous to health on another score: for the surfaces being but little agitated by the gentle winds that commonly blow in the summer, and no motion nor fresh air being communicated to the waters at bottom, while the sun daily acts on them with great power, they necessarily must acquire some degree of *mephitism*. But noxious exhalations will abound still more when the waters are nearly or quite expended—For then the sun's rays penetrating the miry soil, the vapours that had been pent up for long continuance of time, which therefore, may be supposed to have contracted vicious qualities, are now set at liberty, and mix with the air we breathe.

The soil of this country is very various; for within twenty miles of the sea, it is generally light and sandy; but far from being infertile. This, however, is to be understood of the uplands only; for in many other places, the mould is as rich and deep as can be found any where. But even in the most barren lands, vegetation is so luxuriant, when the water

er is showery, that a plentiful increase is reaped from them. On the other hand, such moist weather is productive of innumerable multitudes of those reptiles and insects, that require standing water for their ova to hatch in; some of which are very troublesome to the inhabitants; more especially at night, unless they be secured from their stings, by surrounding the beds with gauze pavillions. At times, the heat of the sun is so great, when the season is dry, and the earth becomes so parched, that no seed which is sown, will grow; and those things that were thriving and prospered well before, may at such times be destroyed, or yield but little. In this respect, however, rice seems the most hardy of all plants; for it will recover when the rains set in, even after it has been burnt down to the ground.

Further back in the country, the islands very generally have a good soil; and the fertility of those that are low, is thought to be inexhaustible.—Even the very mountains are covered with a fine verdure of lofty trees, except in some few places, where the summits consist of naked rocks; amongst which is lime-stone or marble of different colours. But, except in one river, a stone larger than a pebble is not to be found anywhere within twenty miles of the sea, setting aside those that have been brought hither as ballast for ships.

I doubt not but South Carolina produces all sorts of metals—gold, silver, copper, iron, and lead have already been discovered. We also have antimony, allum, talc, black-lead, marle, and very fine white clay, which is fit for making porcelain—likewise have seen emeralds, that were brought from the country of the Cherokee Indians, which, when cut and polished, sell nothing short of those which are imported from India

in lustre; and rock-crystal abounds in several places.

When the English first took possession of this country, excepting savannahs (which are plains naturally without trees) and some small openings, that were here and there made by the Indians, the whole was one continued forest; and perhaps, one twentieth part of it is not yet cleared and cultivated.

From the surfaces, therefore, of so many large rivers, and numerous collections of standing waters; such quantities of sunk, fenney and marshy lands, and the vast Atlantic Ocean that borders on our coast, it may readily be inferred, that excessive exhalations must be made in this sultry climate: to which should we add the exuberant transpiration from the soil, and the abundant perspiration from vegetables of all sorts, which every where cover the ground, the reason will plainly appear, why our climate should be very moist—and that it is so, will be clearly seen from the rain that falls at Charleston, which, at a medium for ten years, was forty-two inches annually, without regarding the moisture that descended in fogs and dews. During the above period, the greatest depth of rain in one year was 54.43, and the least 31.95, inches; the most of twelve hours being 9.26 inches; and on the 28th day of June 1750, the rain of two hours was 5.30. inches. However, 65.96 inches of rain have been known to fall in one year, before I kept a journal of the weather. I will just observe of dews, that where they are heavy, as with us, they shew an atmosphere replete with moisture. And, indeed, so great are they in common seasons, that those who are abroad at night, are presently so damped and chilled by them, that a general and irksome lassitude is quickly perceived; and it is well if nothing worse happen. For so pe-

netrating are those dews, that they quickly pass to the skin (no apparel being proof against them) and thus convey the cool damp air to the surface of the body; beside the ill consequences that may thence ensue to the lungs and passages leading to these organs.—The same may nearly be said of fogs, which, sometimes, in the winter, obscure the sun, for several days together: whence, if no other bad effects ensue, a torpor both of the mind and body will be induced.

During this dark weather, water may be seen pouring down looking-glasses, and whatever is painted; candles burn dimly, the flames appearing as if surrounded with small halos; marshy grounds, ditches, sinks and shallow standing waters, emit an offensive smell; and all things are so damped within doors, where no fires are kept, that on entering a house, one is sensible of such a metaphysical frouzy smell, as is perceived in the apartments of those who are sweating in fevers.

Though it be true, that much rain is a proof of great humidity in the air, yet it is no less certain, that heavy dews and thick fogs indicate the same, with rather more assurance.—For these, more especially the former, never fail at all seasons with us, unless the weather has for a long time been uncommonly hot and dry—and the latter almost as certainly happen in the autumn and winter, when the nights are calm: for supposing the fog not to be general, a thick heavy cloud will then be seen every morning hovering over the rivers and all collections of standing waters, throughout the autumn and winter, unless in time of frost,

It is almost needless to mention that these exhalations do not consist of simple aqueous particles; for they must partake of the qualities of the several bodies that emit them.

Whence it is not unlikely, that according to their various specific properties, or those which may be generated from so heterogeneous a combination, the purity of our air may in some singular manner be affected more especially during the summer when these so very different principles are rendered more active by heat.

As we have no hills nor mountains near us, to collect or conduct the currents of air, the wind seldom blows with a force exceeding four degrees (supposing the whole of its range to be divided by a scale of seven) except in time of a hurricane which happens but seldom, and at rarestated periods.—Nor does such an outrageous storm arise at all, unless the winds have been small, and the weather very hot and dry, for a considerable time before.—Hence should seem, that the air at last becomes so rarefied, as to permit the contiguous denser atmosphere, to rush towards ours with great violence, as into an exhausted receiver in order to restore the equilibrium. On these occasions, the storm always proceeds from the north-east; this being the opposite point to that whence the wind had blown so long before.—And after having exerted its fury for a longer or shorter time (though its greatest impetuosity seldom exceeds twelve hours, and halting as it were overcharged our atmosphere,) it shifts first to east, then to the west, and lastly to the north-west; by which time the elements being as it were balanced, the weather becomes perfectly settled and fair, as if no such furious storm of wind and rain, had raged so immediately before, and threatened us with destruction.—But the ravages it makes may be but too plainly traced, by the many shipwrecks, ruin of houses, and the loss of lives it occasioned.

Notwithstanding the damages sustained by individual persons on such occasions, the want of such tempests for many years together, is probably a great misfortune to us; because the air does not receive so frequent and thorough ventilations, as might be conducive to health, in such a climate as that of South Carolina. But, till the land be more cleared, the atmosphere cannot be wholly renewed even by a hurricane. For the storm which happened in September, of the year 1752, were scarcely perceived one hundred miles back in the country, in a direct line with the wind. Though the first raged for the space of ten hours, yet the wind, violent as it was, could not penetrate such an extent of close woods; notwithstanding many thousands of trees were destroyed in the maritime parts. And as, in very many places, these woods are equally impervious to the sun's rays, it may be supposed, that the air is, in some measure, stagnant in those close recesses; which, for the present, renders them more proper for the habitations of wild beasts than for men. It, therefore, seems plain, that at various circumstances concur to mitigate the salubrity of our climate—every wind, excepting that which comes from the sea, contributing hereto. Of these effects, we might, sometimes, be more sensible, were it not for an acid, or some other saline principle, which seems to predominate in our atmosphere. And that somewhat of this sort does really take place, may be inferred from the speedy rusting of polished metals, and the remarkable fading of such dyed stuffs, as require acids to fix or brighten their colours. For these strongly attracting this salt from the air, it soon prevails over the virtues of the other ingredients. But, whether this salt be proper to the air itself, be of vegetable, mineral or marine production, or be a compound

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of all these blended together, may ever remain a secret. Indeed, we may suppose, that some portion of the essential salts of vegetables, passing by perspiration, may contribute towards it; or that the sea, perhaps, furnishes a part thereof, as our most prevailing winds blow from thence. I would be understood, of the winds in the maritime country only: for in the remote hilly parts, to the westward, from their distance and high situation, the climate is more pure and temperate, and the winds more changeable in the summer; and, in the winter, the weather is bleaker; frosts and deep snows being very common there, when, at the same time, the season is mild and open with us.

Our air is liable to as sudden and great changes in its temperature, as can possibly happen in any country. But, happily, the greatest variations generally are from warm and moist, to cold and clear weather. These extraordinary vicissitudes are most frequent in the winter and spring: though in the autumn, the difference between the heat of the day and night, often exceeds twenty degrees: and the general difference, throughout the year, may be from ten to fifteen degrees, in the space of twenty-four hours, when the weather is settled. But this must only be understood of the shaded air in the day; between which and the heat sustained by those who are exposed to the direct rays of the sun, the difference will be twenty degrees, and still more in some situations.

From this comparatively greater coolness and moisture of the air, at night, it probably is, that when the weather is calm, during the autumn, and even later, the whole country will be covered with a thick fog. For, as the earth retains the heat it received from the sun in the day, longer than the atmosphere does, it

F.

still emits vapours; which yet cannot ascend to any considerable height, because of the colder air above: and as the humidity, which before was diffused aloft, is then made to coalesce and fall lower by its gravity, being thus augmented, they together form those dense clouds, which hang as it were balanced between the cooler medium above, and the warmer one below. But as the heat of the soil abates more, the longer the sun has been absent, the clouds descend still lower, till they cover the face of the earth in such a manner, that, in the morning, the largest objects are intercepted from our view, at the distance of twenty yards, sometimes. But even then, should we look out of a window up two pair of stairs, though the ground below us cannot be seen, the air is perfectly serene at that height. The surrounding higher prospects then appear so very romantic, that the whole looks like enchantment. For as only the tops of trees and houses can be seen, they seem to grow and stand, as it were, in the middle of a great sea; so the fog appears.

This scene will continue till these vapours be exhaled by the sun, or dissipated by the wind; which commonly happens by ten o'clock in the morning, or earlier: and as they evaporate, it is curious to observe, how one part is detached from another, as it were in large white fleeces, rolling over and over: and being wafted along in small thin clouds, by a gentle breeze, the whole will be dispersed before noon, unless the weather continue quite calm.

That there may be some truth in the above reasoning, with respect to the formation of those fogs, seems probable, from their being rarely seen at any considerable distance from our coast: nor is Charleston so liable to them, as the country at a little distance from it, because this

abundant moisture in the air, is repelled by the many fires that are burning. the smoke of chimnies, and the heat that is reflected from the streets and houses. But still they happen too often even with us, notwithstanding these preventives which warm and dry our air: so that it always is from ten to fifteen degrees hotter in town than in the country where it frequently freezes pretty hard, whilst at the same time, no signs of ice appear in town. At this difference of climate, between the two situations, may likewise be the reason, why the people in the country enjoy better health, during the warmest weather, than the inhabitants of Charleston do: and from the same principle, joined to a greater degree of moisture and coolness in the air, it may be also, that, on the contrary, the people in the country are more sickly in the autumn, when the weather is changeable, than when they are in town.

Lightning and thunder happen in all seasons, when it rains immediately after a shift of wind: but from April to September, we seldom have a shower without both; though they generally are most dreadful in June, July and August: and scarcely night passes in summer, but lightning in some part of our horizon.

The short storms, called thunder-gusts, are most violent after great heat, and a particular sultriness in the air, which affects us very sensibly though the thermometer shews nothing of it. When these thunder clouds are forming, it is surprising in how short a time, our atmosphere which was quite serene before, is overcast with a gloomy darkness for the clouds, which are then in view, seem to rush from all directions towards that part, from whence the thunder-shower is to be expected. These foreboding appearances are very alarming: for no one knows what

damage may ensue, or on whom the storm may fall. Nor are these apprehensions unreasonable. For (setting aside the solemn horror attending such an apparatus of black heavy clouds, which suddenly darken the air—the storm of wind and excessive rain, or perhaps hail, which presently follows, together with the almost incessant flashing of lightning and rolling of thunder, seemingly just over our heads) several persons are every year killed by the lightning; beside the damage that is done to houses and ships during these sudden gusts. At such times, the rain does not always pour down with equal violence, short pauses intervening; during which the greatest damage is generally done by the lightning, much of the electrical fluid descending silently when the rain is most heavy. When these thunder-showers happen at night, the scene is more awful: for the firmament seems then to be in a blaze; the glare of lightning and stunning noise of thunder, somewhat resembling a bombardment.

Yet notwithstanding the accidents which may befall some few people at such times, it is not to be doubted, that these reiterated storms are, for the present, of eminent use to mankind in so hot a climate; where, during the summer, the air might contract some degree of mephitism, were it not ventilated, and, as it were, renewed by these temporary agitations; whereby the pernicious vapours are either precipitated with the rain, or dispersed by the winds. And as these heavy rains descend from a colder region, they not only cool and refresh both the air and the earth, whereby we are sensibly invigorated, but they also greatly promote vegetation: and such standing waters as have contracted some degree of putrefaction, are also diluted by the same means, that the exhalations they emit, are now less in-

jurious to health. But it cannot be denied, that if the showers be frequent, or they happen as it were daily for any continued length of time, intermitting or remitting fevers will be more common, especially when the weather sets in warm again, even though it were fair after the earth had been thus drenched, and the ditches and fields were filled with water.

The quantity of rain that was said to fall here, will no doubt appear large to those who live in more temperate climates. Yet by all I could learn, the rains must have been greater as well as more frequent, fifty or sixty years ago: for an old gentleman, who had been provincial secretary in the year 1735, assured me, that in the space of twenty-four hours, an empty tar-barrel thirty inches deep, which stood on end, was filled to the brim by the rain; nay, that much of the water that fell into it, had run over. But to make allowances for exaggeration, he mentioned a gentleman having won a wager which he made, that it would rain on forty successive days, towards the end of summer.

I cannot convey a better idea of the heat we feel, in passing along the streets at noon in the summer, than by comparing it to that glow which strikes one, who looks into a pretty warm oven: for it is so increased by reflexion, from the houses and sandy streets, as to raise the mercury, sometimes, to the 130th division of the thermometer, when the temperature of the shaded air may not exceed the 94th. Solid bodies, more especially metals, absorb so much heat at such times, that one cannot lay his hand on them, even for a short time, without being made very uneasy. Nay, I have seen a beef-steak of the common thickness, so deprived of its juices, when laid on a cannon for the space of twenty minutes, as to be

overdone, according to the usual way of speaking.

How high the mercury would have risen in the sun-shine, during the months of June and July, in the year 1752, when the weather was warmer than it ever had been known here, I could not discover, having then no thermometer, whose scale reached above 120 degrees. But as the mercury rose to this height in the space of fifteen minutes, when the glass was exposed to the sun, suspended at the distance of five feet from the ground, it became necessary to remove that instrument immediately, else it would have bursted. This experiment was made in an open garden, where many things, being still, green shaded the earth; and consequently the heat was thereby lessened. But, from some trials that were since made in cooler weather, I have reason to believe, the mercury would have risen twenty degrees higher at the above season, had a proper instrument been at hand to make the experiment with.

During the hot season we are speaking of, when the shaded air was warmer than the natural heat of our bodies (for the mercury fell six degrees in a thermometer placed in my armpit) those who were exposed to the open sunshine, sustained a degree of heat, greatly surpassing any that ever shewed itself in the most acute disease; or even what is commonly thought to be inconsistent with life, much more health. Yet labourers and tradesmen worked abroad as usual: and blacksmiths, as well as cooks, did their business within doors; a few accidents happening to those, mostly, who lived in small rooms; in particular when their employments obliged them to keep fires in the same apartments; and also others, who overheated themselves by walking or drinking too freely of spiritous liquors, more

especially if they lay down to sleep immediately after. Some again were seized with apoplexies, who happened to be hemmed in by a crowd at public sales; under which several circumstances many people died suddenly in town: and the like befel many negroes in the country, who were much exposed abroad.

At this time, I observed that a negro cook often quitted the kitchen, and stood in the open sunshine for a little while fanning himself with his apron. This shewed that though the heat was very great abroad, it was yet refreshing to him when compared to that which he sustained in the house. But the difference arose from a stream of fresh air or small breeze which was then blowing.

In order to know what degree of heat my servants were exposed to in the kitchen, I suspended a thermometer to a beam, eight feet from the floor, and fifteen from the fire, the windows and doors being all open on both sides of the house: so that this was the coolest station in it. But even here the mercury stood at the 115th division: and notwithstanding this seeming distress, the negroes assured me, they preferred this sort of weather, to the winter's cold.

As a register of the weather, perhaps, was never kept during so warm a season, some extracts from mine, relating to this, may not displease the curious.

The preceding spring having been unusually dry, and not more than 5.41 inches of rain falling in May and June, we had not a shower from the 20th of the latter month, till the 21st of July; the weather in the mean time being excessively hot. The consequence was, that the vapours which floated in the air, were so elevated by rarefaction, that dews soon failed; the great heat of the

lights also contributing to their being retained aloft in the atmosphere; so that by the 13th of July, a general drought prevailed. For the earth was so parched and dry, that not the least perspiration appeared on plants, which shrunk and withered. All standing waters were dried up, as were many wells and springs: so that travellers could not find water, either for themselves or their beasts, for a whole day together: for, the soil being light and very transpirable, was soon drained of its moisture. Those who were so happy as to have a small supply of water in their wells, willingly divided it between themselves and their cattle. But the latter not having a sufficiency to satisfy their cravings, were still clamorous for more; which yet could not be had, till the wells were replenished: and for this event, the poor suffering beasts waited so anxiously, that no living could keep them long from that place. In several settlements, no water could be found, by digging ever so deep: for which reason, the enclosures were laid open, and the cattle driven out to shift for themselves. But very many of them perished for want both of pasturage and water; as probably, did great numbers of those birds, that require a sink: for none of them were to be seen amongst us. In short, the distresses of men and beasts at this time, are not to be described.

When the mercury rose to the 77th and 78th degree of the thermometer in the shade, the atmosphere seemed in a glow, as if fires were kindled around us: the air likewise being so thick and smoky, that the sun appeared as a ball of red-hot metal, and shone very faintly. In breathing, the air felt as if it had passed through fire; or were the nights much less sultry and distressing to us than the days. For the weather being generally

calm, and the mercury often up to the 88th division at bed-time, it was not in our power to lie long still, as being obliged to turn almost incessantly, in order to cool the side we rested on before. Refreshing sleep, therefore, was a stranger to our eyes; inasmuch, that people were in a manner worn down with watching, and the excessive heat together. Nor did this restlessness and frequent tossing prevent our being constantly bathed with sweat; though we lay on thin mattresses spread upon the floor, and had all the windows in our rooms open. Nay, many people lay abroad on the pavements. A man who had been out on some business, died instantly on his returning home, complaining only of his being fatigued and drowsy. His body presently became all over livid; the subcutaneous veins being greatly distended: and an excessive heat was found every where: which, as well as the *venous plethora*, continued but with little abatement, so long as his corpse lay unburied. But so speedy was the putrefaction of this and some other carcases, that they required to be quickly interred. For in the short space of five hours, the body of a pretty corpulent woman, who died as she was ironing linen, burst the coffin; so violent was the putrefaction. In order therefore to prevent such accidents, as well as to guard against the offensive smell of so rapid a putrescence, it was found necessary, to wrap dead bodies in sheets that were rung out of tar, and bind them up tightly with cords.

During this season, a candle was blown out, and set in a chimney at ten o'clock at night, the wick of which continued to burn clearly till next morning; and was likely to do so for many hours longer. Qu. Was this owing to a want of moisture in the air to extinguish it?

When this violently-hot weather

began to break up about the 21st of July, every shower was accompanied with most dreadful lightning and thunder: by which several persons were killed in different places, besides the damages which were done to buildings and vessels. Among other instances of the alarming effects of lightning this year, the distress of one poor family may be related. The father and one of his sons being ploughing with four horses, they, together with the beasts, were all struck dead by one flash. The most dreadful and dangerous showers of this sort happen, when the clouds are collected as it were over our heads, without a brisk wind blowing at the same time, to carry them quickly from us. On such occasions, I have known it to lighten and thunder violently and with but little intermission, for eight or ten hours together: the clouds being all this while so low, that in one afternoon, the lightning fell on sixteen different objects in town; among which were nine dwelling-houses, one church, a meeting-house, and five vessels which were dismasted in part, besides receiving damage in their hulls. Yet, though the lightning struck so many places at this time, only two persons were killed by it.

The sudden death and excessive putrefaction of a dog, which was shut up in a sugar-baker's stove, where the mercury rose to the 146th degree, led dr. Boerhaave into some mistakes, with respect to the effects of heat on living animals: which almost every year are contradicted by experience in this climate. And certainly, no one circumstance that occurred in his experiments, can properly be applied to the effects of warm air, so it be but free, and is not too far deprived of its density and elastic pressure, as it must have been in that hot close place. The creatures, therefore, which were the

subjects of those experiments, could not die of heat alone, but rather the rarity of the air, and the mechanical qualities it contracted in a stove, for want of ventilation. I am we are assured, that, on several occasions, a still greater degree of heat is sustained by mankind, and for a longer time together, without an immediate danger to life.

During the summer of 1752, the mercury often rose above the 90th degree of the thermometer throughout the months of May, June, July, and August: and for twenty successive days, excepting three, in June and July, the temperature of the shaded air varied between the 90th and 101st division: and sometimes it must have been 30 degrees warmer in the open sunshine; to which great numbers of people were daily exposed for many hours together, as already hath been said. I have also mentioned, that in the coolest part of a kitchen, the mercury stood at the 115th degree for several hours together. Besides, those whose business required them to be near the fire sustained a much greater heat without any accident or disease ensuing from it in my family, as well as in most others. Neither was even a more healthy season known than this, so long as the weather continued steadily warm and fair. True indeed it is, that those who happened to sicken during these intensely-hot months, might almost literally be said to have escaped through the fire when they recovered; which few in truth did, who were seized with fevers: and all those died, on whom dropsies had made any considerable progress.

All creatures seem equally affected with man by such intensely-hot weather; for horses sweat profusely in the stable, and flag presently when ridden. Dogs seek the shade, and lie panting, with their tongues lolling

, as if they had long pursued the
ce. Poultry droop the wing, and
athe with open throats; in the
nner cocks do when much heated
fighting. Crows and other wild
vls do the same; and are so un-
ling to move, that they will suf-
a man to come nearer them than
other times, before they fly.

Few days pass throughout the
r in which we do not see the sun:
l the weather, for the most part,
o moderate in the winter, that
dles burn steadily in the open bal-
ies, on nights of public rejoicings.
eldom freezes more than four or
times in the above season: but
n a thaw so soon succeeds, that,
he space of ten years, the ice may
be strong enough to bear a man.
s as unusual to see the ground
ered with snow: and when this
pens, it seldom lies twenty-four
hrs, except in some few places,
ich the sun's rays cannot reach,
eever, we sometimes have hail
h summer showers: and hoar-frosts
frequent in the winter, as halos
at all seasons: but the aurora
ealis is rarely seen: and when it
ears, this is only for a glimpse,
al no more.

As to whirlwinds, or typhons,
y happen but seldom near the sea-
ost, but oftener in the hilly coun-
t behind us, as I have been in-
med: and wherever they pass,
tir route may be plainly traced;
sometimes every thing is demo-
led that stands in their way, trees,
lsts, and birds being hurled along
their vortices.

About ten o'clock in the morning
e the 4th of May 1764, a dreadful
irlwind was said to be observed
the Indian country, above three
hundred miles to the westward of
Charleston; which, between one and
to in the afternoon of the same
or, was seen approaching us very
t: in a direct line, and not three

miles from the town. But when it
had advanced to the distance of about
half a mile from us, it was provi-
dentially opposed by another whirl-
wind, which came from the north-
east; and crossing the point of land
on which Charleston stands, the
shock of their junction was so great
as to alter the direction of the former
somewhat more towards the south,
whereby great part of this place was
preserved from inevitable destruction.
It then passed down Ashley river with
such rapidity and violence that in a
few minutes it reached Rebellion
Road, where a large fleet of loaded
vessels, with one of his majesty's
ships, their convoy, lay, about four
or five miles below the town, ready
to sail for England; three of which
were overset and sunk so suddenly,
that some people, who happened to
be in one of their cabbins, had not
time to come on the deck: and
many of the other ships, which
luckily did not lie so immediately
exposed to the greatest fury of the
tempest, would have shared the same
fate, had not their masts given way;
for all those it passed over, were laid
down on their sides; and the mizen-
mast of the king's ship was carried
off close to the quarter deck, as
smoothly as if it had been cut with
a saw.

As people sat at dinner that day,
they were alarmed with an unusual
sort of stunning noise, as of the rus-
sling of many drums, intermixed with
such a roaring, thundering, churning,
or dashing sound, as the sea makes, in
breaking on a hollow rocky shore,
during a violent storm; when, on
running out of doors, the tremen-
dous cloud was seen advancing at a
great rate; with a quick circular
motion, its contents seeming in a vi-
olent agitation, from the great tu-
mult that appeared, not only in the
body of the column itself, but like-
wise from the contiguous clouds

which drove rapidly towards it from all directions, as if the whole contents of the atmosphere flowed thither, and were instantly absorbed by it. Hence it was, that this meteor every moment appeared so differently; some parts of it being black and dark at times; others of a flame colour; and again as if vast waves of the sea had risen into the air. But such was the perturbation in the cloud, that these phenomena varied continually; all parts of it rolling over each other in the most confused and rapid manner: and, every now and then, large branches of trees might be seen hurled about in it. Its diameter was thought to be about three hundred yards, and the height thirty degrees; a thick vapour emitted from it rising much higher. In passing along, it carried the waters of the rivers before it, in the form of a mountainous wave; so that the bottom was seen in many places. Such floods of water fell on those parts, over which it passed, as if a whole sea had been discharged on them at once: and for a mile or two on each side of it, abundance of rain fell. As the wind ceased presently after the whirlwind passed, the branches and leaves of various sorts of trees, which had been carried into the air, continued to fall for half an hour; and in their descent, appeared like flocks of birds of different sizes. A gentleman, over whose plantation the skirt of this storm passed, not more than two miles from Charleston, assured me, that had a thousand negroes been employed for a whole day in cutting down his trees, they could not have made such a waste of them, as this whirlwind did in less than half a minute. Such trees as were young and pliant, stooped to its violence, and afterwards recovered themselves. But all those, which were more in-

flexible and firmly rooted, were broken off, and hurled away: that no part of many of them could afterwards be found; among which were some live oaks of near two feet diameter, the wood which is known to be almost ponderous and hard as lignum vitae; so that some of these trees must have weighed, perhaps, more than two tons. Yet heavy as they were, no remains of them could afterwards be found any where, except the roots, which were fixed in the earth.

On the forenoon of the above day the wind blew pretty strongly from the west: the atmosphere being much obscured and greatly disturbed with small broken clouds flying swiftly along: so that it had the appearance of the ocean when agitated by tempest.

The lowest station of the thermometer for ten years was 18, and the highest 101, the difference between which, being 83 degrees, may be esteemed the utmost variation in the temperature of the shaded air for the above space of time. This indeed seems greater than might be expected in so southerly a latitude: though for years before, the mercury fell to the tenth division or 22 degrees below freezing. I always made three observations daily; the first before sunrise, the second at two P. M. and the last, at ten o'clock at night; besides noting whatever remarkable difference happened in the state of the air between whiles. Now if the sum of all the stations of the mercury the thermometer be taken together for the year or any number of years and divided by the number of observations that were made, the produce will be 66 degrees, for the annual mean heat of our climate. This exceeds 48, which is nearly the medium of the heat in Great Britain.

more than that does the freezing point.*

The difference in the range of the barometer, for the space of fifteen years, was not more than 1.22 inches: so that if this instrument measure the weight of the atmosphere, that did not vary more than $\frac{1}{25}$ th part, in the above time. Very warm air, or the flame of a candle, held near the tube, will cause the mercury to rise in the barometer: and east or northerly winds do the same; but it subsides with a south or west wind, more especially if the weather be overcast and moist. I say nothing here of the mistake of philosophers, in believing that this instrument measures the real weight of the atmosphere; for to me it seems only to indicate its greater or less springiness and elasticity. Of this many proofs might be given; but they do not belong to this place.

I have mentioned some of the inconveniencies to which our climate exposes us at times: and where is the country which is not liable to equal if not greater disadvantages, without affording the inhabitants such accommodations as that of South Carolina does? In summer, indeed, we have about four months of warm weather; which yet with prudent

care, may be passed over tolerably well. Besides, the heat is not equally excessive every year: and the mildness of the climate, during the other eight months, makes up for whatever uneasiness we suffer in the summer. But, be the heat more or less, it must be got over as well as we can; for without a warm season, neither rice, tobacco, indigo, nor some other valuable productions could be raised. Moreover, this sort of temperature is so adapted to vegetation, that South Carolina produces several commodities which are very advantageous to the commerce of Great Britain and America, and extremely profitable to the people here, some of which will not grow in any province to the northward of us; and I am confident others will be discovered by time; vines and olive trees thriving luxuriantly here.

Besides, many *valetudinarians*, are free of some disorders in the summer, which are not only painful but dangerous during the winter, as will hereafter be seen: and in particular the aged enjoy better health, and are able to quit their chambers during the former season.

Beside the several articles already mentioned, both the air and soil differ so much in the inland parts, from ours near the sea, that every thing, which the temperate climates in Europe yield, may be raised in great abundance there; as all sorts of European fruits, and wheat, hemp, and flax, which all grow extremely well there; of the latter in particular two crops are produced in one year. But the sugar cane, ginger, and other natives of the countries within the tropics, though they thrive well with us during the summer, are destroyed in the winter.

We have hitherto been speaking of vegetables only: but should we mention cattle of all kinds, as well as swine, they multiply here in a sur-

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NOTE.

* I observe, that those who keep registers of the weather in Britain, commonly make their first observation at eight o'clock in the morning, when, at some seasons, the sun has been several hours above the horizon, and consequently the air is by many degrees warmer than before that planet appears. But this, in my opinion, is not the way to discover the real temperature of any climate, which requires that even the lowest as well as the highest stations of the thermometer should be noticed.

prising degree. For as the thickets are warm and close, a constant verdure is found there in the winter, even though the weather should be frosty; for then the young canes or reeds, and several other plants, being green and full of juices, there is no need of houses to shelter, nor of provender to support the cattle during the coldest season; for they lie warm abroad, and brouse on somewhat or other. Any person, therefore, who inclines to raise black cattle, hogs, or horses, marks out a few hundred acres of land in some unsettled part of the country, where he finds a good range; and drives thither as many cows, bulls, hogs, stallions and mares as he pleases, where they increase without any more trouble, than to have a few negroes to plant provisions, in order to keep the hogs together, and use them to the settlement, by giving them a little maize now and then; for the woods yield a sufficiency of nuts and roots to maintain them. As to the black cattle and horses, they are driven up once every year, in order to mark and brand the increase. After which they are again suffered to feed at large, perhaps to the distance of twenty miles, unless it be required to collect some of them for sale, when they are wanted. In this manner, some persons who have stocked such farms with fifty or more black cattle, &c. have in fifteen or twenty years marked three or four thousand calves yearly, and hogs without number, besides horses. These creatures, however, are not without enemies, whilst they are young and unable to defend themselves; for wolves, bears, leopards, panthers and wild cats of a large size, prey on them: and some are also destroyed by the bites of snakes.

We, moreover, abound with all sorts of provisions, which are good in their kinds, and sold at a suffi-

ently cheap rate. Every industrious man may find employment and receive high wages for his labour; that with economy, he has a prospect of acquiring a tolerable fortune in the space of sixteen or twenty years: as very many Dutch people have done, after being cleared of servitude which they consented to undergo, for the payment of their passages hither. Nay, many of them have managed their affairs so well that they now possess several well built houses in town, or have plantations and slaves in the country. A master bricklayer, and a ship house-carpenter, if he work by day, will charge seven shillings a day; and a journeyman to either of these trades, will, for his wages have five pounds sterling by the month; the half of which need not be spent, if he be careful and go the cheapest way to work, though he will live very well at the same time. But then they must abstain from taverns and gaming houses, which being numerous in this place, but too much frequented by many, lead to the neglect of their business and ruin of their families.

As an observation that concerns natural philosophy, I will just mention, that bugs, musketoes and several other insects, are benumbed by cold and cease to be troublesome, when the mercury falls below the boiling point of the thermometer. This, perhaps, shews the reason, why these creatures cannot be generated in great numbers, in any climate where the mean heat does not exceed the boiling degree. Bugs, however, will appear in cities that are closely built, as such places are known to be much warmer than those, that are more open to the air. Besides, when great numbers of houses are crowded together and these are fully inhabited, the heat of the air must thereby be much increased, as well as by the smoke

ny chimnies. Moreover, the heat of the buildings absorb from the sun will again not only be communicated to each other by reflexion, but likewise to the air itself, which, among several others, is one reason, why cities are generally more sickly than villages, unless the latter stand in low and damp situations.

Charleston, the metropolis of South Carolina, stands in the latitude 32 degrees 45 minutes north, and the 79th degree of longitude, or 10 hours and sixteen minutes west of London, at the distance of about twelve hundred leagues, on a S. W. course. The town is built on a narrow peninsula which is formed by the conflux of Ashly and Cooper rivers, which are broad and deep, and discharge their waters into the ocean, about six miles below this place. In these rivers is a rapid flood and ebb, which in the middle of the stream, runs at the rate of between three and four miles in an hour; and the tide, in common, rises and falls about five feet, but at low and full moon seven feet. As the gulph of Florida runs with a swift current towards the N. E. at the distance of about fifteen or twenty leagues from our shore, it will be easily understood, why a strong N. E. wind should always make a high tide in our rivers: as, by directly opposing that stream, it is made to recoil on our coast, and thus causes the rivers to swell. Consequently, during the first hurricane which happened on the 15th of September 1752, the tide was said to be six feet in perpendicular height, in the short space of ten minutes: that had the sea continued to flow in this manner one hour longer, Charleston must inevitably have been destroyed. But though the ordinary time of flood was not then itself spent, providence most mercifully interposed, by causing the

winds to shift to the south, and west, when the waters were carried off, rather more quickly than they rose before. For the storm still continuing, after these latter winds set in, and blowing directly in the same course with the gulph of Florida, so speedily were the waters made to recede, that several people who were obliged to quit the lower floors of their houses, (so high was the tide in them) and retire to the upper rooms, were in a few minutes most agreeably surpris'd to see it entirely gone off: whereas but just before they had expected immediate death.

Three sides of this town are washed by the above rivers; the ground between them being so low and level, that it is not seven feet, nor is the country for twenty miles round, ten feet higher at a medium, than the surface of full sea is at spring tides. This is both a healthy and an agreeable situation in such a climate; for we stand as it were in a large plain, having the sea open to us on one side, and the rivers afford so easy an opportunity to free ourselves of nuisances, as would be thankfully embraced by many communities, who regarded decency, or, which is of greater consequence, health. But I am sorry to say it, we do not avail ourselves of this admirable conveniency, so much as we ought to do.

The streets are from sixty-six to thirty-three feet wide, running from east to west: and these again are intersected by others at right angles, having drains under them, to prevent the water from standing long any where during wet seasons; the good effects of which, with respect to health, are already sensibly felt. But not being paved, except for a few feet along the fronts of the houses, the streets are dirty during rainy weather, and dusty when it is dry. It must, indeed, be confessed,

that the plan of this town was originally bad, considering that the heat of the climate made wide and airy streets necessary: more especially when there was no need for limiting them to such scanty breadths; as in those days there was a sufficiency of ground, which was no man's property, and therefore it might have been disposed of in a manner more suited to the welfare of the future inhabitants. And which is still worse, there are many narrow lanes and alleys; and more are daily laying out, with the view of increasing the value of land. But the legislature should prevent such nuisances; for those confined situations may hereafter prove a nursery for diseases, not of the most tractable kind, when the town becomes large, and is more closely built; in which respects it is amazing to see the vast progress that is making by the great number of houses which are daily raising.

At the distance of six miles, the sea is open to us from the east to the south-east. Georgia and the two Floridas lie to the south-west and west. To the westward is the main continent of North America, the breadth of which is not rightly ascertained. North-west and north is a prodigious tract of country, in which are several vast lakes or inland seas, which, together with the adjacent territories, are frozen half the year: and not many degrees north of these, both the sea and land are almost always bound up with ice: and to the north-east lie the English provinces.

From this view of our situation, it will appear, that as a south wind blows from the warmer latitudes, and sweeps over a great extent of sea, it must always be hot and moist. That which comes from the south-west and west, must be sultry and moist in the summer, as it passes over large spaces of heated, marshy, overflowed

or wood-lands: and in the winter it will bring damps or rain, being fraught with the exhalations that are made from the above soils, as well as with those vapours which are collected and condensed by the high bleak mountains which lie behind us. Or the contrary the winds which blow from the north-west and north, will be cool and refreshing in the summer, but chilling during the winter: and, at all seasons, they dispel clouds and fogs by their pure elastic pressure; so that whenever the weather becomes rainy or overcast, it may be expected to continue so, until the wind shift to one of the above points. We seldom have a clear sky with a north-east wind: more especially towards the autumnal equinox, when it generally blows briskly, and is attended with heavy rain. Lastly, that wind which commonly springs up from the south-east about ten o'clock before noon, in the summer months, is called, by way of eminence, the sea breeze. This at first sets in very gently, causing only a little ruffle on the water now and then: but by degrees it increases in strength, and fans briskly till six or seven in the evening, when it gradually abates, and ceases before night. About eight or nine o'clock, a small westerly wind arises, and continues till the same hour next morning, when it likewise fails: and after a pause of one or two hours, the sea-breeze sets in again: so that these alternately succeed each other in the summer, when the season is regular, and prove wonderfully refreshing to us.

As the land near Charleston is not sufficiently high to give rise to many springs, we, for the most part, use well-water which is always more or less brackish: and it will be quite salt, if these wells be sunk more than eleven or twelve feet; their bottoms being then on an equality

with the surface of the low tide : or will the water rise more than four or five feet in them ; as at that depth it will be on a level with the rivers at full sea. Hence it seems, that these wells are supplied with water from the rivers by filtration through the sand. Fifty-five cubical inches of the water we commonly drink, weighed six grains more than an equal bulk of rain : and when the same weight of sea salt was added to the latter, it precipitated a solution of silver ; became of a milky colour, with oil of tartar per liquium ; and tasted as the well-water. These are proofs, that our water contains a considerable portion of common salt : and accordingly, induces a nausea or griping and vomiting in those who are not accustomed to it. In the country, however, excellent springs abound : and higher than the tide flows, the river water is soft and wholesome ; but being somewhat muddy, it ought to be permitted to settle, before it is used.

As to the way of living in Charleston, it is much after the English manner. But either weak and pretty four punch, or rum well diluted with water, and without acid or sugar, is used by many for drink, though wine and other liquors are likewise brought to table. Tea and coffee are so cheap, that one or both are used once, if not twice in the day, by people of all ranks. But the custom cannot fail in having ill consequences, in some constitutions, particularly during the relaxing heat of the summer : and perhaps the tea itself may possess some qualities that are not friendly to the human constitution ; at least it is injurious to many people. For want of daily markets in the country, more salted and smoked meats are consumed by the people there than in town : there also abound with poultry of all

kinds : much milk is used in various ways : more fruit is eaten in the season ; and less wine is commonly drank, though in general they are far from being sparing in the use of rum. Some of these remarks, however, are to be understood with restriction : for no people in middling life, supply their tables better than gentlemen in the country do : and none entertain strangers or friends with more hospitality. Either the Indian corn, called maize, ground small, or rice boiled with water to a thick consistence, being preferred to bread by many of those who live in the country, they are brought to table almost at every meal. This, as I said above, is out of choice ; for we have plenty of wheat-flour.

It has already been said, that Charleston increases fast in buildings and people : but at present there are not quite twelve hundred dwelling-houses, with nearly as many kitchens which are built separate ; besides a great number of ware-houses, all which being viewed together, give the place the appearance of a large and well-built town. The modern houses are large, airy, and convenient, being from two and a half to three and a half stories high, and of suitable dimensions. And the banks of Cooper river being as yet mostly built upon, and the houses lofty and contiguous, they are seen to great advantage, by those who approach the place from the sea, after a long voyage, as being fully in view for the space of eight or nine miles, before they come to an anchor in the harbour.

The white inhabitants of this town, may be about five thousand five hundred : but the mortality among them, cannot be exactly determined at present, no register thereof having been kept for several years. Formerly, when bills of mortality were annually printed, the inhabi-

tants then being not quite four thousand, it appeared that one in thirty-seven died yearly, or about one out of each family in the space of seven years and a half, supposing all the deceased to have belonged to the place. But these lists were swelled by the deaths of transient persons. It ought, however, to be observed, that, during the time those bills were published, no contagious or malignant distempers prevailed amongst us. And it must also be acknowledged, that we are rather more healthy since the hurricanes of the year 1752; children in particular, having escaped better since; for, before that time, almost half the number of deaths, happened amongst those who were under five years of age. There are many more negroes than white people in this town and province; and those of African descent, are as susceptible of all sort of diseases, as those of the other colour, if we except the yellow or malignant fever and gout. Besides, they are liable to particular complaints which seem peculiar to negroes only. However, even blacks, who live in all respects as we commonly do, are equally obnoxious to the gout with white men.

Births cannot be ascertained from the christenings: for children are not always baptized the same year in which they are born. But it is certain, they far exceed the deaths of the settled inhabitants.

The natives, for the most part, rise above the middling stature: and they attain their full height sooner, than the people usually do in colder climates. In general, they are of a slender make, have pale complexions, thin, fair, or brown hair, which afterwards changes to a chestnut or black colour: but it seldom curls. They are forward in genius, and thought capable of receiving instruction earlier, than children in

Britain commonly are. With respect to their character, they are exceedingly hospitable, and of a mild temper, which yet is not without quick sensibility of any design of affront; but their passions soon subside. Few live sixty years; and the bald or hoary and wrinkled appearances of old age, often shew themselves at the age of thirty years—even earlier, more especially on those who dwell in the country.

The women are in full bloom between their sixteenth and twentieth year: and they are very generally well featured and genteel in person. The menses commonly begin to flow between the twelfth and fourteenth year; and that discharge ceases at different periods, between the thirtieth and fiftieth year of the ages, according as constitutions vary.



*Speech of Oliver Elsworth, esq.
in the convention of the state of Connecticut, appointed to take into consideration the new plan of federal government. Delivered, January 1788, on opening the debates.*

Mr. President,

IT is observable, that there is a preface to the proposed constitution: but it evidently presupposes two things; one is, the necessity of federal government, the other is the inefficacy of the old articles of confederation. A union is necessary for the purposes of national defence. United, we are strong; divided, we are weak. It is easy for hostile nations to sweep off a number of the separate states, one after another. Witness the states in the neighbourhood of ancient Rome. They were successively subdued by that ambitious city; which they might have conquered with the utmost ease, if they had been united. Witness the Canaan

tish nations whose divided situation rendered them an easy prey. Witness England, which, when divided into separate states, was twice conquered by an inferior force. Thus it always happens to small states, and to great ones, if divided. Or, if to avoid this, they connect themselves with some powerful state, their situation is not much better. This shews us the necessity of combining our whole force, and, as to national purposes, becoming one state.

A union, sir, is likewise necessary, considered with relation to economy. Small states have enemies, as well as great ones. They must provide for their defence. The expense of it, which would be moderate for a large kingdom, would be intolerable to a petty state. The Dutch are wealthy; but they are one of the smallest of the European nations; and their taxes are higher than in any other country of Europe. Their taxes amount to forty shillings per head, when those of England do not exceed half that sum.

We must unite, in order to preserve peace among ourselves. If we be divided, what is to prevent wars from breaking out among the states? States, as well as individuals, are subject to ambition, to avarice, to those jarring passions which disturb the peace of society. What is to check these? If there be a parental hand over the whole, this, and nothing else, can restrain the unruly conduct of the members.

Union is necessary to preserve commutative justice between the states. If divided, what is to prevent the large states from oppressing the small? What is to defend us from the ambition and rapacity of New-York, when she has spread over that vast territory which she claims, and holds? Do we not already see in her the seeds of an over-

bearing ambition? On our other side, there is a large and powerful state. Have we not already begun to be tributaries? If we do not improve the present critical time—if we do not unite, shall we not be like Issachar of old, a strong ass crouching down between two burdens? New-Jersey and Delaware have seen this, and have adopted the constitution unanimously.

A more energetic system is necessary. The present is merely advisory. It has no coercive power. Without this, government is ineffectual, or rather is no government at all. But it is said: "Such a power is not necessary. States will not do wrong. They need only to be told their duty, and they will do it." I ask, sir, what warrant is there for this assertion? Do not states do wrong? Whence come wars? One of two hostile nations must be in the wrong. But it is said: "Among sister states, this can never be presumed." But do not we know, that when friends become enemies, their enmity is the most virulent? The seventeen provinces of the Netherlands were once confederated: they fought under the same banner. Antwerp, hard pressed by Philip, applied to the other states for relief. Holland, a rival in trade, opposed, and prevented the needy succours. Antwerp was made a sacrifice. I wish I could say there were no seeds of similar injustice springing up among us. Is there not in one of our states injustice too barefaced for eastern despotism? That state is small: it does little hurt to any but itself. But it has a spirit, which would make a tophet of the universe. But some will say: "We formerly did well without any union." I answer: our situation is materially changed. While Great-Britain held her authority, she awed us. She appointed governors and councils for the American pro-

vinces. She had a negative upon our laws. But now, our circumstances are so altered, that there is no arguing what we shall be, from what we have been.

It is said that other confederacies have not had the principle of coercion. Is this so? let us attend to those confederacies which have resembled our own. Some time before Alexander, the Grecian states confederated together. The amphictyonic council, consisting of deputies from these states, met at Delphos; and had authority to regulate the general interests of Greece. This council did enforce its decrees by coercion. The Bœotians once infringed upon a decree of the amphictyons. A heavy mulct was laid upon them. They refused to pay it. Upon that their whole territory was confiscated. They were then glad to compound the matter. After the death of Alexander the Achæan league was formed. The decrees of this confederacy were enforced by dint of arms. The Ætolian league was formed by some other Grecian cities in opposition to the Achæan; and there was no peace between them, until they were conquered and reduced to a Roman province. They were then obliged to sit down in peace under the same yoke of despotism.

How is it with respect to the principle of coercion in the Germanic body? in Germany there are about three hundred principalities and republics. Deputies from these meet annually in the general diet, to make regulations for the empire. But the execution of these is not left voluntarily with the members. The empire is divided into ten circles; over each of which a superintendent is appointed, with the rank of a major-general. It is his duty to execute the decrees of the empire with a military force.

The confederation of the Swiss

cantons has been considered as an example. But their circumstances are far different from ours. They are small republics, about twenty miles square, situated among the Alps, and inaccessible to hostile attacks. They have nothing to tempt an invader. Till lately, they had neither commerce nor manufactures. They were merely a set of herdsmen. Their inaccessibility has availed them. Four hundred of those mountaineers defeated 15,000 Austrians who were marching to subdue them. They spend the ardour of youth in foreign service; they return old and disposed for tranquillity. Between some of the cantons and France, there has long subsisted a defensive treaty. By this treaty, France is to be a mediator to settle differences between the cantons. If any are obstinate, France is to compel submission to reasonable terms.

The Dutch republic is an example that merits attention. The form of their constitution, as it is on paper, admits not of coercion. But necessity has introduced it in practice. The coercive power is the influence of the stadtholder—an officer originally unknown to their constitution. But they have been necessitated to appoint him, in order to set their unwieldy machine of government in motion. He is commander in chief of the navy, and of their army, consisting of forty or fifty regiments. He appoints the officers of the land and naval forces. He presides in the states general, and in the states of every province, and by means of this, has a great opportunity to influence the elections and decisions. The province of Holland has ever been opposed to the appointment of a stadtholder; because, by its wealth and power, being equal to all the other provinces, it possesses the weight and influence of the stadtholder, when that office is vacant.

Without such an influence, their machine of government would no more move, than a ship without wind, or a clock without weights.

But to come nearer home, mr. President, have we not seen and felt the necessity of such a coercive power? What was the consequence of the want of it during the late war, particularly towards the close? A few states bore the burden of the war. While we, and one or two more of the states were paying eighty or a hundred dollars per man to recruit the continental army, the regiments of some states had scarcely men enough to wait on their officers. Since the close of the war, some of the states have done nothing towards complying with the requisitions of congress; others, who did something at first, seeing that they were left to bear the whole burden, have become equally remiss. What is the consequence? To what shifts have we been driven? To the wretched expedient of negotiating new loans in Europe, to pay the interest of the foreign debt. And what is still worse, we have even been obliged to apply the new loans to the support of our own civil government at home.

Another ill consequence of this want of energy, is, that treaties are not performed. The treaty of peace with Great Britain was a very favourable one for us. But it did not happen perfectly to please some of the states: and they would not comply with it. The consequence is, Britain charges us with the breach, and refuses to deliver up the forts on our northern quarter.

Our being tributaries to our sister states is in consequence of the want of a federal system. The state of New-York raises 60 or 80,000l. a year by impost. Connecticut consumes about one third of the goods upon which this impost is laid; and consequently pays one third

of this sum to New-York. If we import by the medium of Massachusetts, she has an impost, and to her we pay a tribute. If this is done, when we have the shadow of a national government, what shall we not suffer, when even that shadow is gone?

If we go on as we have done, what is to become of the foreign debt? Will sovereign nations forgive us this debt, because we neglect to pay? or will they levy it by reprisals as the laws of nations authorise them? Will our weakness induce Spain to relinquish the exclusive navigation of the Mississippi, or the territory which she claims on the east side of that river? Will our weakness induce the British to give up the northern posts? If a war breaks out, and our situation invites our enemies to make war, how are we to defend ourselves? Has government the means to enlist a man or buy an ox? or shall we rally the remainder of our old army? The European nations. I believe to be not friendly to us. They were pleased to see us disconnected from Great-Britain; they are pleased to see us disunited among ourselves. If we continue so, how easy is it for them to canton us out among them, as they did the kingdom of Poland! But supposing this is not done, if we suffer the union to expire, the least that may be expected, is, that the European powers will form alliances, some with one state and some with another, and play the states off one against another, and that we shall be involved in all the labyrinths of European politics. But I do not wish to continue the painful recital; enough has been said to shew, that a power in the general government to enforce the decrees of the union, is absolutely necessary.

The constitution before us is a complete system of legislative, judicial, and executive power. It was designed to supply the defects of the
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former system; and I believe, upon a full discussion, it will be found calculated to answer the purposes for which it was designed.



Another speech of the same gentleman, on the clause in the new constitution, respecting the power of congress to lay taxes, &c.—Delivered January 7, 1788.

Mr. President,

THIS is a most important clause in the constitution; and the gentlemen do well to offer all the objections which they have against it. Through the whole of this debate, I have attended to the objections which have been made against this clause; and I think them all to be unfounded. The clause is general; it gives the general legislature "power to lay and collect taxes, duties, imposts, and excises, to pay the debts, and provide for the common defence and general welfare of the united states." There are three objections against this clause. First, that it is too extensive, as it extends to all the objects of taxation. Secondly, that it is partial. Thirdly, that congress ought not to have power to lay taxes at all.

The first objection is, that this clause extends to all the objects of taxation. But, though it does extend to all, it does not extend to them exclusively. It does not say that congress shall have all these sources of revenue, and the states none. All, excepting the impost, still lie open to the states. This state owes a debt; it must provide for the payment of it. So do all the other states. This will not escape the attention of congress. When making calculations to raise a revenue, they will bear this in mind. They will not take away that which is necessary for the

states. They are the head, and will take care that the members do not perish. The state debt, which now lies heavy upon us, arose from the want of powers in the federal system. Give the necessary powers to the national government, and the state will not be again necessitated to involve itself in debt for its defence in war. It will lie upon the national government to defend all the states to defend all its members, from hostile attacks. The united states will bear the whole burden of war. It is necessary, that the power of the general legislature should extend to all the objects of taxation, that government should be able to command all the resources of the country; because no man can tell what our exigencies may be. Wars have now become rather wars of the purse, than of the sword. Government must therefore be able to command the whole power of the purse, otherwise a hostile nation may look into our constitution, see what resources are in the power of government, and calculate to go a little beyond us; thus they may obtain a decided superiority over us, and reduce us to the utmost distress. A government, which can command but half its resources, is like a man with but one arm to defend himself.

The second objection is that the impost is not a proper mode of taxation; that it is partial to the southern states. I confess I am mortified when I find gentlemen supposing that their delegates in convention were inattentive to their duty, and made a sacrifice of the interests of their constituents. If, however, the impost be a partial mode, this circumstance is as high as my opinion of it is, would weaken my attachment to it; for I abhor partiality. But I think there are three special reasons, why an impost is the best way of raising a national revenue.

The first is, it is the most fruitful and easy way. All nations have found it to be so. Direct taxation will go but little way towards raising revenue. To raise money in this way, people must be provident; they must be constantly laying up money to answer the demands of the collector. But you cannot make people thus provident. If you would do any thing to purpose, you must come in when they are spending, and take a part with them. This does not take away the tools of man's business, or the necessary ensils of his family: It only comes, when he is taking his pleasure, and feels generous; when he is laying out a shilling for superfluities, takes two-pence of it for public use, and the remainder will do him much good as the whole. I will instance two facts, which shew how easily and insensibly a revenue is raised by indirect taxation. I suppose people in general are not sensible that we pay a tax to the state of New-York. Yet it is an incontrovertible fact, that we, the people of Connecticut, pay annually into the treasury of New-York, more than fifty thousand dollars. Another instance I will mention: One of our common river sloops pays in the West-Indies a portage-bill of £.60. This is a tax which foreigners lay upon us, and we pay it. For a duty laid upon our shipping, which transports our produce to foreign markets, sinks the price of our produce, and operates as an effectual tax upon those who till the ground, and bring the fruits of it to market. All nations have seen the necessity and propriety of raising a revenue by indirect taxation, by duties upon articles of consumption. France raises her revenue of 24 millions sterling per annum; and it is chiefly in this way. Fifty millions of livres they raise upon the single article of salt. The

Swiss cantons raise almost the whole of their revenue upon salt. Those states purchase all the salt which is to be used in the country: they sell it out to the people at an advanced price: the advance is the revenue of the country. In England, the whole public revenue is about twelve millions sterling per annum. The land tax amounts to about two millions; the window and some other taxes to about two millions more. The other eight millions are raised upon articles of consumption. The whole standing army of Great-Britain could not enforce the collection of this vast sum by direct taxation. In Holland, their prodigious taxes, amounting to forty shillings for each inhabitant, are levied chiefly upon articles of consumption. They excise every thing, not excepting even their houses of infamy.

The experiments, which have been made in our own country, shew the productive nature of indirect taxes. The imports into the united states amount to a very large sum. They never will be less, but will continue to increase for centuries to come. As the population of our country increases, the imports will necessarily increase. They will increase; because our citizens will choose to be farmers, living independently on their freeholds, rather than to be manufacturers, and work for a groat a day. I find by calculation, that a general impost of 5 per cent. would raise the sum of £.245,000 per annum, deducting 8 per cent. for the charges of collecting. A further sum might be deducted for smuggling, a business which is too well understood among us, and which is looked upon in too favourable a light. But this loss in the public revenue will be overbalanced by the increase of importations. And a further sum may be reckoned upon some articles, which will bear a high-

er duty than the one recommended by congress. Rum, instead of 4d. per gallon, may be set higher, without any detriment to our health or morals. In England it pays a duty of 4s. 6d. the gallon. Now let us compare this source of revenue with our national wants. The interest of the foreign debt is £.130,000 lawful money per annum. The expenses of the civil list are £.37,000. There are likewise further expenses for maintaining the frontier posts, for the support of those who have been disabled in the service of the continent, and some other contingencies, amounting, together with the civil list, to £.130,000. This sum added to the interest of the foreign debt, will be £.260,000. The consequence follows, that the avails of the impost will pay the interest of the whole foreign debt, and nearly satisfy these current national expenses. But perhaps it will be said that these paper calculations are overdone, and that the real avails will fall far short. Let me point out, then, what has actually been done. In only three of the states, in Massachusetts, New-York and Pennsylvania, 160, or £.180,000 per annum have been raised by impost. From this fact, we may certainly conclude, that, if a general impost should be laid, it would raise a greater sum than I have calculated. It is a strong argument in favour of an impost, that the collection of it will interfere less with the internal police of the states, than any other species of taxation. It does not fill the country with revenue officers; but is confined to the sea coast, and is chiefly a water operation. Another weighty reason in favour of this branch of revenue is, if we do not give it to congress, the individual states will have it. It will give some states an opportunity of oppressing others, and destroy all harmony between them.

If we would have the states friendly to each other, let us take away the bone of contention, and place it, it ought in justice to be placed in the hands of the general government.

“But,” says an honourable gentleman near me, “the impost will be partial tax: the southern states will pay but little in comparison with the northern.” I ask, what reason there for this assertion? Why, say he, we live in a cold climate, and want warming. Do not they live in a hot climate, and want quenching? Until you get as far south as the Carolinas, there is no material difference in the quantity of clothing which is worn. In Virginia they have the same course of clothing that we have. In Carolina they have a great deal of cold, raw, chilly weather: even in Georgia, the river Savannah has been crossed upon the ice. And if they do not wear quite so great a quantity of clothing as those states as with us; yet people of rank wear that which is of a much more expensive kind.—In these states we manufacture one half of our clothing and all our tools of husbandry; in those, they manufacture none, nor ever will. They will not manufacture; because they find much more profitable to cultivate their lands, which are exceedingly fertile. Hence they import almost every thing, not excepting the carriages in which they ride, the hoes with which they till the ground, and the boots which they wear. If we doubt of the extent of their importations, let us look at their exports. So exceedingly fertile and profitable are their lands, that a hundred large ships are every year loaded with rice and indigo from the single port of Charleston. The rich returns on these cargoes of immense value, will be all subject to the impost. No thing is omitted; a duty is to be

paid upon the blacks which they import. From Virginia their exports are valued at a million sterling per annum: the single article of tobacco amounts to seven or eight hundred thousand. How does this come back? not in money; for the Virginians are poor to a proverb, in money. They anticipate their crops: they spend faster than they earn: they are ever in debt. Their rich exports return in eatables, in drinkables, and in wearables. All these are subject to the impost. In Maryland, their exports are as great in proportion as those in Virginia. The imports and exports of the southern states are quite as great in proportion as those of the northern. Where then exists this partiality, which has been objected? It exists no where, but in the uninformed mind.

But there is one objection, Mr. President, which is broad enough to cover the whole subject. Says the objector, congress ought not to have power to raise any money at all. Why? Because they have the power of the sword! and if we give them the power of the purse, they are despotic. But I ask, sir, if ever there were a government without the power of the sword and the purse? This is not a new-coined phrase: but it is misapplied: it belongs to quite another subject. It was brought into use in Great-Britain, where they have a king vested with hereditary power. Here, say they, it is dangerous to place the power of the sword and the purse in the hands of one man who claims an authority, independent of the people: therefore we will have a parliament. But the king and parliament together, they have the supreme power of the nation, they have the sword and the purse. And they must have both: else how could the country be defended? for the sword, without the purse is of no effect: it is a sword in the scabbard. But does it follow, because

it is dangerous to give the power of the sword and purse to a hereditary prince, who is independent of the people, that therefore it is dangerous to give it to the parliament—to congress, which is your parliament—to men appointed by yourselves, and dependent upon yourselves? This argument amounts to this, you must cut a man in two in the middle, to prevent his hurting himself.

But, says the honourable objector, if congress levy money, they must legislate. I admit it. Two legislative powers, says he, cannot exist together in the same place. I ask, why can they not? It is not enough, to say, they cannot. I wish for some reason. I grant that both cannot legislate upon the same object, at the same time, and carry into effect laws which are contrary to each other. But the constitution excludes every thing of this kind. Each legislature has its province; their limits may be distinguished. If they will run foul of each other, if they will be trying who has the hardest head, it cannot be helped. The road is broad enough; but if two men will juggle each other, the fault is not in the road. Two several legislatures have in fact existed, and acted at the same time in the same territory. It is in vain to say they cannot exist, when they actually have done it. In the time of the war, we had an army. Who made the laws for the army? By whose authority were offenders tried and executed? Congress. By their authority a man was taken, tried, condemned, and hanged in this very city. He belonged to the army: he was a proper subject of military law; he deserted to the enemy; he deserved his fate. Wherever the army was, in whatever state, there congress had complete legislative, judicial and executive power. This very spot where we now are, is a city, complete legislative, judicial,

and executive powers? It is a complete state in miniature. Yet it breeds no confusion, it makes no schism. The city has not eaten up the state, nor the state the city. But if there be a new city, if it have not had time to unfold its principles, I will instance the city of New-York, which is and long has been, an important part of that state; it has been found beneficial; its powers and privileges have not clashed with the state. The city of London contains three or four times as many inhabitants as the whole state of Connecticut. It has extensive powers of government: and yet it makes no interference with the general government of the kingdom. This constitution defines the extent of the powers of the general government. If the general legislature should at any time overleap their limits, the judicial department is a constitutional check. If the united states go beyond their powers, if they make a law which the constitution does not authorize, it is void; and the judicial power, the national judges, who, to secure their impartiality, are to be made independent, will declare it to be void. On the other hand, if the states go beyond their limits, if they make a law which is an usurpation upon the general government, the law is void; and upright independent judges will declare it to be so. Still, however, if the united states and the individual states will quarrel, if they want to fight, they may do it, and no frame of government can possibly prevent it. It is sufficient for this constitution, that, so far from laying them under a necessity of contending, it provides every reasonable check against it. But perhaps at some time or other, there will be a contest, the states may rise against the general government. If this do take place, if all the states combine, if all oppose, the whole will not eat up the mem-

bers, but the measure which is opposed to the sense of the people, will prove abortive. In republics, it is a fundamental principle, that the majority govern, and that the minority comply with the general voice. How contrary then to republican principles, how humiliating is our present situation! A single state can rise up, and put a *veto* upon the most important public measures. We have seen this actually take place. A single state has controuled the general voice of the union; a minority, a very small minority has governed us. So far is this from being consistent with republican principles, that it is in effect the worst species of monarchy.

Hence we see how necessary for the union is a coercive principle. No man pretends the contrary: we all see and feel this necessity. The only question is, shall it be a coercion of law, or a coercion of arms? There is no other possible alternative. Where will those, who oppose a coercion of law, come out? where will they end? A necessary consequence of their principles is a war of the states one against another. I am for coercion by law—that coercion which acts only upon delinquent individuals. This constitution does not attempt to coerce sovereign bodies, states in their political capacity. No coercion is applicable to such bodies, but that of an armed force. If we should attempt to execute the laws of the union by sending an armed force against a delinquent state, it would involve the good and bad, the innocent and guilty, in the same calamity.

But this legal coercion singles out the guilty individual, and punishes him for breaking the laws of the union. All men will see the reasonableness of this; they will acquiesce, and say, let the guilty suffer.

How have the morals of the people

men depraved for the want of an efficient government, which might establish justice and righteousness—or the want of this, iniquity has come in upon us, like an overflowing flood. If we wish to prevent this alarming evil—if we wish to protect the good citizen in his right—we must lift up the standard of justice; we must establish a national government, to be enforced by the equal decisions of law, and the peaceable arm of the magistrate.



Speech of the rev. mr. Shute in the convention of Massachusetts, on the article of the new federal constitution, which provides, that no religious test shall ever be required as a qualification to an office.

Mr. President,

TO object to the latter part of the paragraph under consideration, which excludes a religious test, I am sensible, very popular; for the most of men, some how, are rigidly tenacious of their own sentiments in religion, and disposed to impose them upon others, as the standard of truth. If in my sentiments, upon the point in view, I should differ from some in this honourable body, I only wish for the exercise of that candour, with which true religion is adapted to inspire the honest and well-disposed mind.

To establish a religious test, as a qualification for an office in the proposed federal constitution, it appears to me, sir, would be attended with injurious consequences to some individuals, and with no advantage to the whole.

By the injurious consequences to individuals, I mean, that some, who, in every other respect, are qualified to fill some important post in government, would be excluded by their not

being able to stand the religious test, which I take to be a privation of part of their civil rights.

Nor is there to me any conceivable advantage, sir, that would result to the whole, from such a test. Unprincipled and dishonest men will not hesitate to subscribe to any thing, which may open the way for their advancement, and put them in a situation the better to execute their base and iniquitous designs. Honest men, alone, therefore, however well qualified to serve the public, would be excluded by it, and their country be deprived of the benefit of their abilities.

In this great and extensive empire, there is and will be a great variety of sentiments in religion among its inhabitants. Upon a plan of a religious test, the question, I think, must be, who shall be excluded from national trust? Whatever answer bigotry might suggest—the dictates of candour and equity, I conceive, will be “none.”

Far from limiting my charity and confidence to men of my own denomination, in religion, I suppose, and I believe, sir, there are worthy characters among men of every other denomination—among the quakers—the baptists, the church of England—the papists—and even among those who have no other guide, in the way to virtue and heaven, than the dictates of natural religion.

I must, therefore, think, sir, that the proposed plan of government, in this particular, is wisely constructed; that as all have an equal claim to the blessings of the government under which they live, and which they support, so none shall be excluded from them by being of any particular denomination in religion.

The presumption is, that the eyes of the people will be upon the faithful in the land; and from a regard to their own safety, will choose for their

rulers, men of known abilities—of known probity—of good moral characters. The apostle Peter tells us, that “God is no respecter of persons, but in every nation, he that feareth him, and worketh righteousness, is acceptable to him:” and I know of no reason, why men of such a character in a community, of whatever denomination in religion, *ceteris paribus*, with suitable qualifications, should not be acceptable to the people, and why they may not be employed by them, with safety and advantage in the important offices of government. The exclusion of a religious test in the proposed constitution, therefore, clearly appears to me, sir, to be in favour of its adoption.



Speech of Mr. Symmes, in the convention of Massachusetts, on that section of the new federal constitution, which vests congress with power to impose taxes—Delivered January 22, 1788.

Mr. President,

IN such an assembly as this, and on a subject, that puzzles the oldest politicians, a young man, sir, will scarcely dare to think for himself; but if he venture to speak, the effort must certainly be greater.—This convention is the first representative body, in which I have been honoured with a seat; and men will not wonder, that a scene at once so new, and so august, should confuse, oppress and almost disqualify me to proceed.

Sir, I wish to bespeak the candour of the convention—that candour which, I know, I need but ask, to have it extended to me, while I make a few indigested observations on the paragraph now in debate. I have hitherto attended with diligence, but no great anxiety, to the

reasoning of the ablest partizans both sides of the question. Indeed could have wished for a more factual, and (if I may term it) a more feeling representation in the lower house, and for a representation of the people in the senate. I have been and still am desirous a rotation in office, to prevent the final perpetuation of power in the same men.—And I have not been able clearly to see why the place and manner of holding elections should be in the disposal of congress.

But, sir, in my humble opinion these things are comparatively the lesser things of the law.—They do not less have their influence in the grand effect, and so are essential to the system. But sir, I view the section to which we have at length arrived as the cement of the fabric, as this clause as the key-stone, or (I may apply the metaphor) the national talisman on which the fate it depends.

Allow me, sir, to recal to your remembrance, that yesterday when the states were in doubt about granting to congress a five per cent. impost and the simple power of regulating trade—the time when so delicate was the patriotic mind, that power was to be transferred with a reluctance with a sparing hand—and the most obvious utility could scarcely extort it from the people. It appears to me of some importance, to consider this matter, and to demand complete satisfaction upon the question why an unlimited power in congress in an affair of taxation, is so soon required? is our situation so vastly different, that the powers, so lately sufficient, are now but the dust of the balance? I observe, sir, that many men, who, within a few years past, were strenuous opposers of an augmentation of the power of congress, are now the warmest advocates of a power, so large as not

mit of a comparison with those which they opposed. Cannot some of them state their reasons then, and their reasons now, that we may judge of their consistency—or shall we be left to suppose that the opinions of politicians, like those of the multitude, vibrate from one extreme to the other, and that we have no men among us, to whom we can intrust the philosophic task of pointing out the golden mean?

At present, congress have no power to lay taxes, &c. nor even to compel a compliance with their requisitions. May we not suppose, that the members of the great convention, had severely felt the urgency of congress, while they were in it, and therefore were rather too easily set for an effectual increase of power? That the difficulties they encountered, in obtaining decent requisitions, had wrought in them a degree of impatience, which prompted them to demand the purse-strings of the nation, as if we were inventors, and the proposed congress were to compound with our creditors?—Whence, sir, can this great, and almost said, this bold demand, have originated? Will it be said, that it is but a consistent and necessary part of the general system? Shall not deny these gentlemen the right of inventing a system completely consistent with itself, and yet free from contradiction—but should ask, I shall expect to be answered, how a system can be necessary for us, of which this is a consistent and necessary part?

But, sir, to the paragraph in hand congress, &c.,

Here, sir, (however kindly congress may be pleased to deal with us) is a very good and valid conveyance of all the property in the United States—to certain uses, indeed, but those uses capable of any construction, the trustee may think proper.

per to make. This body is not amenable to any tribunal, and therefore, this congress can do no wrong.—It will not be denied, that they may tax us to any extent, but some gentlemen are fond of arguing that this body never will do any thing, but what is for the common good. Let us consider that matter.

Faction, sir, is the vehicle of all transactions in public bodies, and when gentlemen know this so well, I am rather surprized to hear them so sanguine in this respect. The prevalent faction is the body—these gentlemen, therefore, must mean that the prevalent faction will always be right, and that the true patriots will always outnumber the men of low and selfish principles. From this it would follow, that no public measure was ever wrong, because it must have been passed by the majority, and so, I grant no power ever was, or will be abused,—In short, we know that all governments have degenerated, and consequently have abused the powers reposed in them: and why we should imagine better of the proposed congress, than of myriads of public bodies who have gone before them, I cannot at present conceive.

Sir, we ought (I speak it with submission) to consider that what we now grant from certain motives well grounded at present, will be exacted of posterity as a prerogative when we are not alive, to testify the tacit conditions of the grant—that the wisdom of this age will then be pleaded by those in power—and that the cession we are now about to make, will be actually clothed with the venerable habit of ancestral sanction.

Therefore, sir, I humbly presume we ought not to take advantage of our situation in point of time, so as to bind posterity to be obedient to laws, they may very possibly dis-

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approve, nor expose them to a rebellion, which at that period will very probably end only in their farther subjugation.

The paragraph in question, is an absolute decree of the people. The congress shall have power—it does not say that they shall exercise it—but our necessities say, they must, and the experience of ages says, that they will, and finally, when the expences of the nation, by their ambition, are grown enormous, that they will oppress the subject. For, sir, they may lay taxes, duties, imposts and excises!—One would suppose that the convention, sir, were not at all afraid to multiply words when any thing was to be got by it. By another clause, all imposts and duties, on exports and imports, wherever laid, go into the federal chest—so that congress may not only lay imposts and excises, but all imposts and duties that are laid on imports and exports, by any state, shall be a part of the national revenue—and besides, congress may lay an impost on the produce and manufactures of the country, which are consumed at home. And all these shall be equal through the states. Here, sir, I raise two objections—1st. that congress should have this power. It is a universal, unbounded permission—and as such, I think, no free people ought ever to consent to it, especially in so important a matter as that of property. I will not descend, sir, to an abuse of this future congress, until it exists, nor then, until it misbehaves, nor then, unless I dare. But I think that some certain revenue, amply adequate to all necessary purposes, upon a peace establishment, but certain and definite, would have been better, and the collection of it might have been guaranteed by every state to every other. We should then have known to what

we were about to subscribe, and should have cheerfully granted it. But now, we may indeed grant, who can cheerfully grant—he knows not what?

Again, sir, I object to the equality of these duties through the states. It matters not with me, in the present argument, which of them suffer by this proportion.—Some probably will, as the consumption of dutied articles will not, if we judge from experience, be uniform in all.

But, say some, with whom I have conversed, it was for this reason that taxes were provided, that their assistance the defect of duties in some states ought to be supplied. Now then, let us suppose that the duties are so laid, that every state paid in proportion, that which paid most, the duty alone would supply a frugal treasury. Some states will pay but 1 their proportion and some will scarcely pay any thing. But those general who pay the least duty, the inland states, are least of all able to pay a land-tax, and therefore do not see but this tax would operate most against those who are least able to pay it.

I humbly submit it, sir, whether if each state had its proportion of some certain gross sum assigned according to its numbers, and a power was given to congress to collect the same, in case of default in a state, this would not have been a safer constitution?—For, sir, I disapprove of the power to collect which is here vested in congress—is a power, sir, to burden us with a standing army of ravenous collectors—harpies perhaps from another state, but who, however, were never known to have bowels for any purpose, but to fatten on the life-blood of the people. In one age or another this will be the case, and when

gress shall become tyrannical, these vultures, their servants, will be the tyrants of the village, by whose presents all freedom of speech and action will be taken away.

Sir, I shall be told that these are imaginary evils—but I hold to this axiom, that power was never given (in this kind especially) but it was exercised—and never exercised, but it is finally abused. We must not be lulled with handsome probabilities, we must be assured that we are in no danger, and that this congress would not distress us, if they were so much disposed.

To pay the debts, &c.

These words, sir, I confess are an ornament to the page: and very fiscal words—But they are too general to be understood as any kind of limitations of the power of congress, and not very easy to be understood at all. When congress have the purse, they are not confined to frugality and œconomy, and the word debts, is not confined to debts already contracted, or indeed, if it were,

the term “general welfare” might be applied to any expenditure whatever. Or if it could not, who shall be so bold to gainsay the proceedings of this body at a future day, when according to the course of nature it will be too firmly fixed in the saddle, to be overthrown by any thing but a general insurrection; an event not to be expected, considering the extent of this continent: and if it were to be expected, a sufficient reason in itself for rejecting this or any constitution that would tend to produce it.

This clause, sir, is the very spirit of the constitution. And I hope the universality of it may be singular; but it may be easily seen that it tends to produce in time, as universal powers in every other respect. As the poverty of individuals prevents luxury, so the poverty

of public bodies whether sole or aggregate, prevents tyranny. A nation cannot, perhaps, do a more politic thing than to supply the purse of its sovereign with that parsimony, which results from a sense of the labour it costs, and so to compel him to comply with the genius of his people, and conform to their situation, whether he will or not. How different will be our conduct, if we give the entire disposal of our property to a body, as yet almost unknown in theory, in practice quite, heterogeneous in its composition, and whose maxims are yet entirely unknown.

Sir, I wish the gentlemen, who so ably advocate this instrument, would enlarge upon this formidable clause, and I most sincerely wish that the effect of their reasoning, may be my conviction. For, sir, I will not dishonour my constituents, by supposing that they expect me to resist that which is irresistible—the force of reason. No, sir, my constituents ardently wish for a firm, efficient, continental government, but fear the operation of this which is now proposed. Let them be convinced that their fears are groundless, and I venture to declare, in their name, that no town in the commonwealth, will sooner approve the form, or be better subjects under it.



Speech of the rev. mr. Thacher in the convention of Massachusetts, on the merits of the new constitution.—Delivered February 4. 1788.

Mr. President,

WHILE the different paragraphs of the proposed constitution have been debated, I have not troubled this honourable convention with any observations of my own upon the subject. Conscious that there were men of deeper political

knowledge and of better abilities than myself, I conceived it my duty to attend to their instruction, that having heard with attention, I might decide with integrity. I view the object before us, as of greater moment than ever was known within the memory of man, or that hath been recorded by the historic page. Were we, mr. President, this day to decide on the lives and fortunes of an hundred of the best citizens of this commonwealth, solemn would that province be; but much more interesting is the result of the present question; for in this case not a single city—not a single state—but a continent, wide and extended, may be happy or wretched according to our judgment; and posterity will either bless us for laying the foundation of a wise and equal government, or curse us for neglecting their important interests, and for forging chains for them, when we disdained to wear them ourselves. Having therefore, as I trust, a full view of the magnitude of the object, I hope I shall be pardoned, if I offer my sentiments with freedom. I am sensible of the prejudices that subsist against the profession to which I belong; but yet, entrusted by my constituents with so solemn a charge, I think they have a right to expect from me the reasons why I shall finally consent to ratify the proposed form of government.

There are three circumstances which deserve notice in considering the subject. These are, the necessity that all the states have of some general bond of union—the checks upon the government in the form offered for our adoption—and lastly, the particular disadvantages to which we shall be exposed, if we reject it.

With respect to the first of these considerations, I trust there is no man in his senses, but what will own, that the whole country hath largely felt the want of energy in the general go-

vernment. While we were at war with Britain, common danger produced a common union; but the cause being removed, the effect ceased also. Nay, I do not know but we may safely add, that that union produced by uniform danger, was but made grater to general and national purposes. This commonwealth, with a generous disinterested regard to the good of the whole, appeared foremost in the day of danger. At the conclusion of the late war, two-thirds of the continental army were from Massachusetts—their provision and the clothing proceeded also in a generous measure from our extraordinary exertions. The people did this in the fullest confidence, that, when peace and tranquillity were restored, from the honour and justice of our sister states, our supernumerary expenses would be abundantly repaid. But alas! how much have our expectations been blasted? The congress though willing, yet had no power to do us justice. The small district of Rhode Island, put a negative upon the collected wisdom of the continent. This was done not by those who are the patrons of their present infamous system of paper currency—but by that part of them who now call themselves honest men. We have made exertions to stop the importation of foreign luxuries. Our brethren in the neighbouring states, from the view of local advantages, have taken occasion to distress us upon the same account. They have encouraged where we have prohibited; and by those iniquitous measures, have made our virtue and public spirit, an additional cause of our calamity. Not only have our calamities been local—but they have reached to all parts of the united states, and have produced dissipation and indigence at home, and contempt in foreign countries. On the one hand, the haughty Spaniard has deprived us of the navigation of the

ver Mississippi—on the other, the British nation are, by extravagant pretensions, ruining our fishery. Our sailors are enslaved by the pirates of Algiers : our credit is reduced to so low an ebb, that American faith is a proverbial expression for perfidy, as Punic faith was among the Romans. Thus have we suffered every species of infamy abroad, and poverty at home. Such, in fact, have been our calamities, as are enough to convince the most sceptical among us, of the want of a general government, in which energy and vigour should be established, and at the same time, the rights and liberties of the people preserved.

A constitution hath been presented to us, which was composed and planned by men, who, in the council and field, have, in the most conspicuous offices, served their country in the late war. It comes authenticated by a man, who, without any pecuniary reward, commanded our army, and who retired to a private station with more pleasure than he left it. I do not say, mr. President, that this proves the form of government to be perfect, or that it is an unanswerable argument that we should adopt it. But it is a reason why we should examine it with care and caution, and that we should not rashly and precipitately to reject it.

It will be objected, "that there are more powers granted than are necessary, and that it tends to destroy the local governments of the particular states, and that it will eventually end either in aristocracy or despotism." To answer the objection, two considerations should be taken into view—the situation of the continent, when a constitution was formed—and the impossibility of preserving a perfect sovereignty in the states, after necessary powers were ceded to a supreme council of the whole. As to the first, let us candidly examine the

state of these republics, from New Hampshire to Georgia, and see how far vigour and energy were required. During the session of the late convention, Massachusetts was on the point of civil war. In Vermont and New Hampshire, a great disaffection to their several governments prevailed among the people. New York absolutely refused complying with the requisitions of congress. In Virginia, armed men endeavoured to stop the courts of justice : in South Carolina, creditors by law were obliged to receive barren and useless land, for contracts made in silver and gold. I pass over the instance of Rhode Island ; their conduct was notorious. In some states, laws were made directly against the treaty of peace : in others, statutes were enacted, which clashed directly against any federal union. New lands sufficient to discharge a great part of the continental debt, intruded upon by needy adventurers : our frontier settlements exposed to the ravages of the Indians, while the several states were unable or unwilling to relieve their distress. Lay all these circumstances together, and you will find some apology for those gentlemen, who framed this constitution : I trust you may charitably assign other motives for their conduct, than a design to enslave their country, and to parcel out for themselves, its honours and emoluments.

The second consideration deserves its weight. Can the local governments be sufficient to protect us from foreign enemies, or from disaffection at home ? Thirteen states are formed already. The same number are probably to be formed from the lands not yet cultivated. Of the former, yet smaller divisions may be made. The province of Maine hath desired a separation ; in time, a separation may take place. Who knows but that the same may happen with respect to the old colony of Plymouth,

Now conceive the number of states increased—their boundaries lessened,—their interests clashing! How easy a prey to a foreign power! How liable to war among themselves! Let these arguments be weighed; and, I dare say, sir, there is no man but what would conceive, that a coercive power over the whole, searching through all parts of the system, is necessary to the preservation and happiness of the whole people.

But I readily grant all these reasons are not sufficient to surrender up the essential liberties of the people. But do we surrender them? This constitution hath been compared both by its defenders and opponents to the British government: in my view of it, there is a great difference. In Britain, the government is said to consist of the three forms, monarchy, aristocracy, and democracy; but in fact, is but a few removes from absolute despotism. In the crown is vested the power of adding at pleasure, to the second branch—of nominating to all the places of honour and emolument—of purchasing, by its immense revenues, the suffrages of the house of commons—the voice of the people is but the echo of the king, and their boasted privileges lie entirely at his mercy. In this proposed form, each branch of power is derived either mediately or directly from the people. The lower house are elected directly by those persons who are qualified to vote for the representatives of the state; and at the expiration of two years, become private men, unless their past conduct entitles them to a future election. The senate are elected by the legislatures of the different states, and represent their sovereignty. These powers are a check on each other, and can never be made either dependent on one another, or independent of the people. The president is chosen by electors, who are appointed by the people. The high

courts of justice arise from the president and senate; but yet the ministers of them can be removed only upon bad behaviour. The independence of judges is one of the most favourable circumstances to public liberty for when they become the slaves of a venal corrupt court, and the hireling of tyranny, all property is precarious and personal security at an end—man may be stripped of all his possessions, and murdered with the form of law.

Thus it appears that all parts of this system arise ultimately from the people, and are still independent of each other. There are other restraints, which, though not directly named in this constitution, yet are evidently discerned by every man of common observation. These are the governments of the several states and the spirit of liberty in the people. Are we wronged or injured? Our immediate representatives are those to whom we ought to apply—their power and influence will still be great. But should any servants of the people, however eminent their stations, attempt to enslave them, from the spirit of liberty such opposition would arise, as would bring them to the scaffold. But admitting that there are dangers in accepting this general government; yet are there not greater hazards in rejecting it? Such is, mr. President, the state of our affairs, that it is not in our power to carve for ourselves. To avoid the greatest, and to choose the least of two evils, is all that we can do. What then will be the probable effect, if this constitution be rejected? Have we not reason to fear new commotions in this commonwealth? If they arise, can we be always certain that we shall be furnished with a citizen, who, though possessed of extensive influence and the greatest abilities, will make no other use of them, than to

quiet the tumult of the people, to prevent civil war, and to restore the usual course of law and justice? Are we not in danger from other states, when their interests or prejudices are opposite to ours? And in some such scenes of hostile contention, will not some Sylla drench the land in blood, or some Cromwell or Cæsar lay our liberties prostrate at his feet? Will not foreign nations attack us in our weak, divided condition, and once more render us provinces to some potentate of Europe? Or will those powers, to whom we are indebted, be quiet? They certainly will not. They are now waiting for our decision; but when they once see that our union is broken, and that we are determined to neglect them, they will issue out letters of marque and reprisal, and entirely destroy our commerce.

If this system is broken up, will thirteen or even nine states ever agree to another? And will providence smile on a people, who despise the privileges put into their hands, and who neglect the plainest principles of justice and honesty? After all, I may no means pretend, that there is complete perfection in this proposed constitution—like all other human productions, it hath its faults—provision is made for an amendment, whenever from practice it is found oppressive. I would add the proposals which his excellency has condescended to lay before this honourable convention, respecting future alterations, and real improvements for the better, and we have no reason to doubt, but they will be equally attended to by other states, as they lead to common security and preservation.

Some of the gentlemen in the opposition have quoted ancient history, and applied it to the question now under debate. They have shewn us the danger which arises from vesting

magistrates with too much power. I wish they had gone on to tell the whole truth. They might have shewn how nearly licentiousness and tyranny are allied—that they who will not be governed by reason, must submit to force—that demagogues, in all free governments, have first held out an idea of extreme liberty, and have seized on the rights of the people under the mask of patriotism. They might have shewn us a republic, in which wisdom, virtue, and order, were qualities, for which a man was liable to banishment; and on the other hand, boasting, sedition, and falsehood, the sure road to honour and promotion.

I am sorry that it hath been hinted by some gentlemen in this house, as if there were a combination of the rich, the learned, and those of liberal professions, to establish and support an arbitrary form of government—Far be it from me to retort, so uncharitable, and unchristian a suggestion. I doubt not the gentlemen who are of different sentiments from myself, are actuated by the purest motives. Some of them I have the pleasure to be particularly acquainted with, and can safely pronounce them to be men of virtue and honour—They have, no doubt, a laudable concern for the liberties of their country; but I would beg them to remember, that extreme jealousy and suspicion may be as fatal to freedom as security and negligence.

With respect to myself, I am conscious of no motives which guide me in this great and solemn question, but what I could justify to my own heart, both on the bed of death, and before the tribunal of Omnipotence. I AM A POOR MAN—I HAVE THE FEELINGS OF A POOR MAN. If there are honours and emoluments in this proposed constitution, I shall,

by my profession and circumstances in life, be for ever excluded from them. It is my wish and prayer, that in the solemn verdict we are soon to pronounce, we may be directed to that measure, which will be for the glory, freedom and felicity of my country.

I shall trouble this house no further, than wishing sincerely, that the people, in this their day, may know the things which belong to their peace.

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Speech of mr. Barrel, in the convention of Massachusetts, on the new constitution, and the necessity of amendments thereto—Delivered February, 5, 1788.

Mr. President,

AWE D in the presence of this august assembly—conscious of my inability to express my mind fully on this important occasion—and sensible how little I must appear in the eyes of those giants in rhetoric, who have exhibited such a pompous display of declamation—without any of those talents calculated to draw attention—without the pleasing eloquence of Cicero, or the blaze of Demosthenian oratory, I rise, sir, to discharge my duty to my constituents, who, I know, expect something more from me than merely a silent vote. With no pretensions to talents above the simple language adapted to the line of my calling, the plain husbandman, I hope the gentlemen who compose this honourable body, will fully understand me when I attempt to speak my mind of the federal constitution as it now stands.—I wish, sir, to give my voice for its amendment before it can be salutary for our acceptance—because, sir, notwithstanding the Wilsonian oratory, and all the learned arguments I have

seen written—notwithstanding if many laboured speeches I have heard in its defence, and after the best investigation I am able to give the subject, I fear it is pregnant with baneful effects, although I may not live to feel them.

Because, sir, as it now stands congress will be vested with more extensive powers than ever Great Britain exercised over us—too great in my opinion, to entrust with any class of men, let their talents and virtues be ever so conspicuous, even though composed of such exalted amiable characters as the great Washington: for while we consider them as men of like passions, the same spontaneous, inherent thirst for power with ourselves—great and good as they may be, when they enter upon this all-important charge what security can we have that they will continue so? And, sir, were we sure they would continue the faithful guardians of our liberties and prevent any infringement on the privileges of the people—what assurance can we have that such men will always hold the reins of government? that their successors will be such? History tells us Rome was happy under Augustus—though wretched under Nero, who could have no greater power than Augustus—and yet this same Nero when young in government, could shed tears on signing a death warrant, though afterwards become so callous to the tender feelings of humanity, as to behold with pleasure, Rome in flames.

Because, sir, I think that six years are too long a term for any set of men to be at the helm of government: for in that time they may get so firmly rooted, and their influence be so great, as to continue themselves for life.

Because, sir, I am not certain we are able to support the additional

pense of such a government. Because, sir, I think a continental collector will not be so likely to do us justice in collecting the taxes, as collectors of our own.

Because sir, I think a frame of government, on which all laws are founded, should be so simple and explicit, that the most illiterate may understand it; whereas this appears to me so obscure and ambiguous, that the most capacious mind cannot fully comprehend it.

Because, sir, the duties of excise and impost and to be taxed besides, appear too great a sacrifice: and when we have given them up, what still we have to pay our own debts at a dry tax?

Because, sir, I do not think this will produce the efficient government we are in pursuit of.

Because, sir, they will fix their salaries without allowing any trouble.

And because, sir, I think such a government may be disagreeable to men with the high notions of liberty, we Americans have.

And, sir, I could wish this constitution had not been in some parts of the continent hurried on like the driving of Jehu, very furiously: for such important transactions should be conducted without force, and with cool deliberation. These, sir, were my objections, and those of my constituents, as they occur to my memory; some of which have been removed in the course of the debates, by the ingenious reasonings of the speakers.

With I could say the whole were. But after all, there are some yet remaining on my mind—enough to convince me, that excellent as this system is in some respects it needs alterations; therefore I think it becomes us as free men—as the faithful guardians of the people's rights—and as we wish well to posterity, to propose such amendments, as will secure to

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us and ours that liberty, without which life is a burden.

Thus, sir, have I ventured to deliver sentiments in which are involved those of my constituents on this important subject, cautiously avoiding every thing like metaphysical reasoning; lest I should invade the prerogative of those respectable gentlemen of the law who have so copiously displayed their talents on this occasion—But, sir, although you may perceive, by what I have said, that this is not in my view, the most perfect system I could wish—yet as I am possessed with an assurance, that the proposed amendments will take place—as I dread the fatal effects of anarchy—as I am convinced the confederation is essentially deficient, and that, it will be more difficult to amend that than to reform this—and as I think this constitution, with all its imperfections, is excellent, compared with that—and that it is the best constitution we can now obtain—as the greatest good I can do my country at present, I could wish for an adjournment, that I might have an opportunity to lay it before my constituents, with the arguments which have been used in the debates, which have eased my mind, and, I trust, would have the same effect on theirs, so as heartily to join me in ratifying the same: but, sir, if I cannot be indulged in this desirable object, I am almost tempted to risque their displeasure, and adopt it without their consent.



Speech of the rev. mr. Stillman, in the convention of Massachusetts, on the general question, to ratify the new federal constitution, with the amendments proposed by his excellency governor Hancock.—Delivered February 6, 1788.

Mr. President,

IRise, with deference to gentlemen of superior abilities, to give

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my opinion on the present all-important national question, and the reasons on which it is founded—an opinion, the result of the most serious deliberation.

Upon entering the convention, it was my full determination, to keep my mind cool, and open to conviction, so that I might profit by the discussion of this interesting subject. And now, sir, I return my sincerest thanks to the gentlemen who have taken opposite sides in the course of the debates. From both I have received advantage: from one class, in bringing forward a great variety of objections; from the other class in answering them. Whatever my previous opinion was, I now stand on firmer ground than ever, respecting the proposed constitution.

But my present situation, sir, is to me extremely affecting. To be called by the voice of my fellow-citizens, to give my vote for or against a constitution of government, that will involve the happiness or misery of millions of my countrymen, is of so solemn a nature, as to have occasioned the most painful anxiety.

I have no interest to influence me to accept this constitution of government, distinct from the interest of my countrymen at large. We are all embarked in one bottom, and must sink or swim together.

Besides, sir, heaven has fixed me in a line of duty, that precludes every prospect of the honours and the emoluments of office. Let who will govern, I must obey. Nor would I exchange the pulpit, for the highest honours my country can confer. I too have personal liberties to secure, as dear to me as any gentleman in the convention, and as numerous a family, probably, to engage my attention. Besides which, I stand here, with my very honourable colleagues, as a representative of the citizens of this great metropolis,

who have been pleased to honour with their confidence: an honour in my view, unspeakably greater than a peerage or a pension.

The absolute deficiency of articles of confederation, is allowed by all. Nor have I seen any publication that places this subject in so convincing a point of light, as a letter written by his excellency governor Randolph which has appeared several of our newspapers; which I rather introduce on this occasion, because he was a delegate to the late federal convention—refused to sign the constitution before us, and has been twice mentioned by gentlemen in opposition. His courage, apparent in the letter referred to, does him honour, and merits the esteem of every candid mind. I declare, sir, I revere his character, while I differ from him in opinion.

“Before my departure for the (federal) convention, says he, I believed, that the confederation was not so eminently defective as it had been supposed. But after I had entered into a free conversation with those who were best informed of the condition and interest of each state—after I had compared the intelligence derived from them, with the properties that ought to characterize the government of our union—I became persuaded, that the confederation was destitute of every energy which the constitution of the united states ought to possess.” And after he had in a most masterly manner proved its inefficiency, he adds: “I now, sir, permit me to declare, that in my humble judgment, the powers, by which alone the blessings of a general government can be accomplished, cannot be introduced into the confederation, without a change of its very essence; or, in other words, that the confederation must be thrown aside.”

having stated his objections to it, he proceeds thus, "My inference from these facts and principles, is, that the new powers must be deposited in a new body, growing out of the consolidation of the union as far as the circumstances of the states will allow." Thus fully and indidly does this gentleman insist on the absolute necessity of a new constitution of general government, at the very time that he objected to the present form; and concludes his letter with these memorable words, which I most heartily wish may make deep impression on the mind of every gentleman in the opposition—"I hesitate not to say, that the most fervent prayer of my soul is, the establishment of a firm energetic government; that the most inveterate curse which can befall us, is, a dissolution of the union; and that the present moment, if suffered to pass away unemployed can never be recalled.—I shall therefore cling to the union as the rock of our salvation, and urge Virginia to finish the salutary work which she hath begun.—And if, after our best efforts for amendments, they cannot be obtained, I scruple not to declare, (notwithstanding the advantage the declaration may give to the enemies of my proposal) that I will, as an individual citizen, accept the constitution."

—I pause, sir—that every gentleman present may have time to indulge those feelings, which these excellent expressions must occasion. May that God, who has the hearts of all men under his controul, inspire every member of this convention with a similar disposition! Then shall we lay aside every opposite interest, and unite, as a band of brothers, in the ratification of this constitution of national government.

Then, sir, will your terms of con-

ciliation be attended to with gratitude and candour Your excellency depressed with bodily infirmity, and exercised with severe pain, have stepped forth at the critical moment, and from the benevolence of your heart, presented us with a number of proposed amendments, in order, if possible, to quiet the minds of the gentlemen in opposition, and bring us together in amity and peace—amendments which you, sir, declare you do not think necessary, except for the sole purpose of uniting us in a common and most important cause.

But what has been the consequence of your excellency's conciliatory propositions?—Jealousy, jealousy, sir, that there was a snake in the grass; a secret intention to deceive! I shudder at the ungenerous suggestion; nor will I dwell a moment longer on the distressing idea. Be banished forever the groundless suspicion of him, whose name stands foremost in the list of American patriots!—Let love and harmony prevail.

The important hour is just arrived, when the die will be cast, that will in a great measure determine the fate of this commonwealth, and have a mighty influence on the general interest of the union. For from the best information I have been able to collect from gentleman of observation, and of undoubted veracity, in different states, there is the greatest reason to fear, that the rejection of this constitution will be followed with anarchy and confusion.

The convention, I doubt not, will bear with me while I take a general view of the constitution before us. From all that has been said on the subject of biennial elections, it is my decided opinion, that two years in the general government will not be in proportion to one year in the local governments; because in the former, the objects of government will be great, numerous, and extensive; in

the latter, comparatively small and limited. The general government involves all the states now in the union—all such as shall in future accede to it—all foreign nations with whom we now are or hereafter shall be in alliance—an extensive and growing commerce—war and peace, &c. &c.

It has been said, that this is a stride toward septennial elections, or perpetuity in office. I answer, the constitution itself is to be the rule. That declares, that “representatives shall be chosen every second year by the people of the several states.” Elections, then, of representatives, must be every second year; nor can they be otherwise, without a direct violation of the constitution. The men who shall be wicked enough to do this, would not be restrained, had the elections been annual; it being equally easy to violate the constitution in the one case as in the other. Elections indeed, ought to be so frequent, as to make the representatives feel that they are dependent on, and amenable to the people. The difference then between annual and biennial elections, is small; and either will answer the end just mentioned.

The powers, which are granted to congress by this instrument, are great and extensive: but, fir, they are defined and limited, and in my judgment, sufficiently checked; which I shall prove, before I sit down. These powers have been the subject of long and ingenious debate. But the arguments, that have been made use of against delegating these powers to the general government, prove too much, being applicable to all delegated power; I mean the possible abuse of it. The very term, government, implies a supreme, controuling power somewhere—a power to coerce, whenever coercion shall be necessary: of which necessity, government must be the judge. This is admitted; if

so, the power may be abused. Every gentleman must confess, that we cannot give a power to do good, but may be abused to do evil. If a merchant commit the care of a ship or cargo to the master; he may dispose of both, and appropriate the money to his own use. If we raise a body of men, and put arms into their hands for our defence; they may turn the arms against us, and destroy us. All the things prove, however, that in order to guard as much as possible against the abuse of those powers we delegate to government, there ought to be sufficient checks to them: every precaution should be used, to secure the liberties of the people on the one hand, and not render government inefficient on the other. I believe, if such security is provided in this constitution: if not, no consideration shall induce me to give my voice in its favour. But the people are secure by the following circumstances:

1st. All the offices in congress are elective, not hereditary. The president and senators are to be chosen by the interposition of the legislatures of the several states; who are the representatives and guardians of the people; whose honour and interest will lead them, in all human probability to have good men placed in the general government.

The representatives in congress are to be chosen every second year by the people in the several states. Consequently, it lies with the people themselves to say who shall represent them. It will therefore be their own fault, if they do not choose the best men in the commonwealth.

Who are congress then? they are ourselves: the men of our own choice in whom we can confide; whose interest is inseparably connected with our own. Why is it, then, that gentlemen speak of congress as some foreign body—as a set of men who will

seek every opportunity to enslave us? Such insinuations are repugnant to the spirit of the constitution.

But a worthy gentleman from Middleborough has told us, that though they may be good men when chosen, they may become corrupt. They may so: nor is it in the power of angels or men to prevent it: but should this be the case, the constitution has made provision for such an event. When it happens, we shall know what method to adopt, in order to bring them to punishment.

2. In all governments, where officers are elective, there ever has been, and here ever will be, a competition of interests. Those who are in office, wish to keep in, and those who are out, to get in: the probable consequence of which will be, that those who are already in place, will be attentive to the rights of the people; because they know that they are dependent on them for a future election, which can be secured by good behaviour only. Besides, those who are out of office, will watch those who are in with a most critical eye, in order to discover and expose their mal-conduct, if guilty of any, that so they may step into their places. Every gentleman knows the influence, that a desire to obtain a place, or the fear of losing it, hath on mankind. Mr. Burgh tells us, that towards the close of the seven years, for which the representatives are chosen in the British parliament, they become exceedingly polite to the people: why? because they know there is an approaching election depending. This competition of interest, therefore, between those persons who are in, and those who are out of office, will ever form one important check to the abuse of power in our representatives.

3. Every two years there will be a revolution in the general government, in favour of the people. At the expiration of the first two years, there

will be a new choice of representatives: at the expiration of the second two years, there will be a new choice of president and representatives: and at the expiration of the third term, making six years from the commencement of the congress, there will be a new choice of senators and representatives. We all know, sir, that power, thus frequently reverting to the people, will prove a security to their liberties, and a most important check to the power of the general government.

4. Congress can make no laws that will oppress the people, which will not equally involve themselves in the oppression. What possible motive, then, can congress have to abuse their power? Can any man suppose, that they will be so lost to their own interest, as to abuse their power, knowing, at the same time, that they equally involve themselves in the difficulty? It is a most improbable supposition. This would be like a man's cutting off his nose to spite his face. I place this, sir, among the securities of the liberties of my-fellow citizens, and rejoice in it.

5. Congress guarantee to every state in the union a republican form of government, and engage to protect them against all foreign and domestic enemies; that is, as it hath been justly observed by the hon. gentleman (mr. Adams) near me, of known and tried abilities as a politician, each state shall choose such republican form of government as they please, and congress solemnly engage themselves to protect it from every kind of violence, whether of faction at home, or enemies abroad. This is an admirable security of the people at large, as well as of the several governments of the states; consequently the general government cannot swallow up the local governments, as some gentlemen have sug-

gested. Their existence is dependent on each other, and they must stand or fall together. Should congress ever attempt the destruction of the particular legislatures, they would be in the same predicament with Sampson, who overthrew the house in which the Philistines were making sport at his expense; 'them he killed indeed, but he buried himself in the ruins.

6. Another check in favour of the people, is this—that the constitution provides for the impeachment, trial, and punishment of every officer in congress, who shall be guilty of mal-conduct. With such a prospect, who will dare to abuse the powers vested in him by the people?

7. Having thus considered several of the checks to the powers of congress, which are interwoven with the constitution, we will now suppose the worst that can take place, in consequence of this adoption; I mean, that it shall be found in some of its parts oppressive to the people; still we have this dernier resort, it may be amended. It is not like the laws of the Medes and Persians, immutable. The fifth article provides for amendments.

It has been said, it will be difficult, after its ratification, to procure any alterations. By no means, sir—for this weighty reason: it is a general government, and such as will have a general influence. All the states in the union will feel the difficulty; and, feeling it, will readily concur in adopting the method provided by the constitution: and having once made a trial, experience will teach us what amendments are necessary.

Viewing the constitution in this light, I stand ready to give my vote for it without any amendments at all. Yet if the amendments proposed by your excellency, will tend to conciliation, I readily admit them, not as a condition of acceptance, but

as a matter of recommendation only knowing that, "Blessed are the peace makers."—I am ready, sir, to submit my life, my liberty, my family, my property, and, as far as my vote will go, the interests of my constituents, to this general government.

After all, if this constitution were as perfect as the sacred volume is, it would not secure the liberties of the people, unless they watch their own liberties. Nothing written on paper will do this. It is therefore necessary, that the people should keep watchful, not an over-jealous eye on their rulers; and that they should give all due encouragement to our colleges, schools of learning, &c. that so knowledge may be diffused through every part of our country. Ignorance and slavery, knowledge and freedom are inseparably connected. While Americans remain in their present enlightened condition, and warmly attached to the cause of liberty, they cannot be enslaved. Should the general government become so lost to all sense of honour and the freedom of the people, as to attempt to enslave them, they, who are the descendants of a race of men, who have dethroned kings, would make an American congress tremble; strip them of their public honours; and reduce them to the lowest state of degradation.



Speech of mr. Ames, on the subject of the biennial elections of the house of representatives, in the proposed system of federal government. Delivered in the convention of Massachusetts, January 22, 1788.

I Do not regret mr. President, that we are not unanimous upon this question. I do not consider the diversity of sentiment which prevails, as an impediment in our way to the disco-

very of truth. In order that we may think alike upon this subject at last, we shall be compelled to discuss it, by ascending to the principles upon which the doctrine of representation is grounded.

Without premeditation, in a situation so novel, and awed by the respect which I feel for this venerable assembly, I distrust extremely my own feelings, as well as my competency to prosecute this enquiry. With the hopes of an indulgent hearing, I will attempt to proceed. I am sensible, sir, that the doctrine of frequent elections, has been sanctified by antiquity: and is still more endeared to us, by our recent experience, and uniform habits of thinking. Gentlemen have expressed their zealous partiality for it. They consider this as a leading question in the debate, and that the merits of many other parts of the constitution are involved in the decision. I confess, sir, and I declare, that my zeal for frequent elections, is not inferior to their own. I consider them as one of the first securities for popular liberty, in which its very essence may be supposed to reside. But how shall we make the best use of this pledge and instrument of our safety? A right principle, carried to an extreme, becomes useless. It is apparent, that a delegation for a very short term, as for a single day, would defeat the design of representation. The election in that case would not seem to the people to be of any importance; and the person elected would think as lightly of his appointment. The other extreme is equally to be avoided. An election for a very long term of years, or for life, would remove the member too far from the controul of the people, would be dangerous to liberty, and, in fact, repugnant to the purposes of the delegation. The truth, as usual, is placed somewhere between the extremes;

and I believe is included in this proposition: The term of election must be so long, that the representative may understand the interests of the people, and yet so limited, that his fidelity may be secured by a dependence upon their approbation.

Before I proceed to the application of this rule, I cannot forbear to premise some remarks upon two opinions which have been suggested.

Much has been said about the people divesting themselves of power, when they delegate it to representatives; and that all representation is to their disadvantage, because it is but an image, a copy, fainter and more imperfect than the original—the people—in whom the light of power is primary and unborrowed which is only reflected by their delegates. I cannot agree to either of these opinions. The representation of the people is something more than the people. I know, sir, but one purpose which the people can effect without delegation, and that is, to destroy a government. That they cannot erect a government, is evinced by our being thus assembled, on their behalf. The people must govern by a majority, with whom all power resides. But how is the sense of this majority to be obtained? It has been said, that a pure democracy is the best government for a small people, who may assemble in person. It is of small consequence to discuss it, as it would be inapplicable to the great country we inhabit. It may be of some use in this argument, however, to consider, that it would be very burdensome—subject to faction and violence: decisions would often be made by surprise, in the precipitancy of passion, by men who either understood nothing, or cared nothing about the subject; or by interested men, or those who voted for their own indemnity. It would be a government not by laws, but by men.

Such were the paltry democracies of Greece and Asia Minor, so much extolled, and so often proposed as models for our imitation. I desire to be thankful that our people are not under any temptation to adopt the advice. I think it will not be denied, that the people are gainers by the election of representatives. They may destroy, but they cannot exercise the powers of government, in person: but by their servants, they govern. They do not renounce their power—they do not sacrifice their rights—they become the true sovereigns of the country, when they delegate that power, which they cannot use themselves, to their trustees.

I know, sir, that people talk about the liberty of nature, and assert, that we divest ourselves of a portion of it, when we enter into society. This is declamation against matter of fact. We cannot live without society: and as to liberty, how can I be said to enjoy that, which another may take from me when he pleases? The liberty of one depends not so much on the removal of all restraint from him, as on the due restraint upon the liberty of others. Without such restraint, there can be no liberty. Liberty is so far from being endangered or destroyed by this, that it is extended and secured. For I said, that we do not enjoy that, which another may take from us. But civil liberty cannot be taken from us, when any one may please to invade it: for we have the strength of the society of our side.

I hope, sir, that these reflexions will have some tendency to remove the ill impressions which are made by proposing to divest the people of their power.

That they may never be divested of it, I repeat, that I am in favour of frequent elections. Those, who commend annual elections, are desired to

consider, that the question is, whether biennial elections be a defect in the constitution? for it does not follow because annual elections are safe, the biennial are dangerous: for both may be good. Nor is there any foundation for the fears of those, who say that if we, who have been accustomed to choose for one year only, now extend it to two, the next stride will be to five, or seven years, and the next for term of life: for this article, with all its supposed defects, is in favour of liberty. Being inserted in the constitution, it is not subject to be repealed by law. We are sure that it is the worst of the case.

It is a fence against ambitious encroachments too high and too strong to be passed: in this respect, we have greatly the advantage of the people of England, and of all the world.—The law, which limits their parliaments, is liable to be repealed.

I will not defend this article, by saying that it was a matter of compromise in the federal convention: it has my entire approbation as it stands. I think we ought to prefer in this article, biennial elections to annual and my reasons for this opinion, are drawn from these sources:

From the extent of the country to be governed;

The objects of the legislation;

And the more perfect security of our liberty.

It seems obvious, that men, who are to collect in congress from this great territory, perhaps from the bay of Fundy, or from the banks of the Ohio, and the shore of Lake Superior, ought to have a longer term in office, than the delegates of a single state, in their own legislature. It is not by riding post to and from congress, that a man can acquire a just knowledge of the true interests of the union. This term of election is inapplicable to the state of a country as large as Germany, or as the Ro-

man empire in the zenith of its power.

If we consider the objects of their delegation, little doubt will remain. It is admitted that annual elections may be highly fit for the state legislatures. Every citizen grows up with a knowledge of the local circumstances of the state. But the business of the federal government will be very different. The objects of their power are great and national. At least two years in office will be necessary to enable a man to judge of the trade and interests of states which he never saw. The time, I hope, will come, when this excellent country will furnish food (and freedom, which is better than food—which is the food of the soul) for fifty millions of happy people. Will any man say, that the national business can be understood in one year?

Biennial elections appear to me, sir, an essential security to liberty. These are my reasons.

Faction and enthusiasm are the instruments by which popular governments are destroyed. We need not talk of the power of an aristocracy. The people, when they lose their liberties, are cheated out of them. They nourish factions in their bosoms, which will subsist so long as abusing their honest credulity, shall be the means of acquiring power. A democracy is a volcano, which conceals the fiery materials of its own destruction. These will produce an eruption, and carry desolation in their way. The people always mean right: and if time be allowed for reflexion and information, they will do right.

I would not have the first wish—the momentary impulse of the public mind, become law; for it is not always the sense of the people; with whom, I admit, that all power resides. On great questions, we first hear the loud clamours of passion, artifice, and faction. I consider biennial

elections as a security, that the sober second thought of the people shall be law. There is a calm review of public transactions, which is made by the citizens who have families, and children, the pledges of their fidelity. To provide for popular liberty, we must take care that measures shall not be adopted without due deliberation.

The member, chosen for two years, will feel some independence in his seat. The factions of the day will expire before the end of his term.

The people will be proportionably attentive to the merits of a candidate. Two years will afford opportunity to the members to deserve well of them: and they will require evidence that they have done it.

But, sir, the representatives are the grand inquisition of the union. They are by impeachment to bring great offenders to justice. One year will not suffice to detect guilt, and pursue it to conviction. Therefore they will escape, and the balance of the two branches, will be destroyed, and the people oppressed with impunity. The senators will represent the sovereignty of the states. The representatives are to represent the people. The offices ought to bear some proportion in point of importance. This will be impossible, if they be chosen for one year only.

Will the people then blind the eyes of their own watchmen? Will they bind the hands which are to hold the sword for their defence? Will they impair their own power, by an unreasonable jealousy of themselves?

For these reasons, I am clearly of opinion, that the article is entitled to our approbation, as it stands: and as it has been demanded, why annual elections were not preferred to biennial, permit me to retort the question, and to enquire in my turn, what reason can be given, why, if

annual elections be good, biennial elections are not better ?



Resolves proposed to the federal convention, by the honourable mr. Patterson, of New Jersey.

1. **R**ESOLVED, that an union of the states, merely federal, ought to be the sole object of the exercise of the powers vested in this convention.

2. Resolved, that the articles of the confederation ought to be so revised, corrected, and enlarged, as to render the federal constitution adequate to the exigencies of government, and the preservation of the union.

3. Resolved, that in addition to the powers vested in the united states in congress, by the present existing articles of confederation, they be authorised to pass acts for raising a revenue by laying a duty or duties on all goods and merchandise of foreign growth or manufacture, imported into any part of the united states; by imposing stamps on paper, parchment, and vellum; and by a postage on all letters and packages passing through the general post office, to be applied to such federal purposes, as they shall deem proper and expedient; to make rules and regulations, for the collection thereof; and the same from time to time to alter and amend in such manner as they shall think proper: provided that all punishments, fines, forfeitures, and penalties, to be incurred for contravening such rules and regulations, shall be adjudged by the common law judiciaries of the state in which any offence, contrary to the true intent and meaning of such rules or regulations, shall be committed or perpetrated; with liberty of commencing all suits or prosecutions for that purpose, in the first instance, in

the supreme common law judiciary of such state—subject, nevertheless to an appeal in the last resort, for the correction of errors, both of law and fact, in rendering judgment, to the judiciary of the united states; and that the united states shall have authority to pass acts for the regulation of trade and commerce, as well with foreign nations, as with each other.

4. Resolved, that should requisitions be necessary, instead of the present rule, the united states in congress be authorised to make such requisitions in proportion to the whole number of white and other free citizens and inhabitants, of every age, sex, and condition, including those bound to servitude for term of years, and three-fifths of a other persons, not comprehended in the foregoing descriptions (except Indians not paying taxes.)

5. Resolved, that if such requisitions be not complied with, in the time specified therein, the united states in congress shall have power to direct the collection thereof in the non-complying states; and for that purpose to devise and pass acts directing and authorising the same: provided that none of the powers hereby vested in the united states in congress shall be exercised without the consent of at least states; and in that proportion, should the number of confederated states hereafter be increased or diminished.

6. Resolved, that the united states in congress, shall be authorised to elect a federal executive, to consist of one person or persons, to continue in office for the term of years to receive punctually, at stated time a fixed compensation for the service by him or them to be rendered, in which no increase or diminution shall be made, so as to affect the executive in office, at the time of such increase or diminution, to be paid out of the federal treasury; to be incapable of holding any other o

fice or appointment during the time of service, and for years after; to be ineligible a second time, and removable on impeachment and conviction for mal-practice, corrupt conduct, and neglect of duty.

7. Resolved, that the executive, besides a general authority to execute the federal acts, ought to appoint all federal officers, not otherwise provided for, and to direct all military operations; provided that the executive shall not on any occasion take command of any troops, so as personally to conduct any military enterprise as general, or in any other capacity.

8. Resolved, that the legislative acts of the united states, made under and in pursuance to the articles of union, and all treaties made and ratified under the authority of the united states, shall be the supreme law of the respective states, as far as those acts or treaties shall relate to the said states or their citizens and inhabitants; and that the judiciaries of the several states shall be bound thereby in their decisions; any thing in the respective laws of the individual states to the contrary notwithstanding.

9. Resolved, that if any state or body of men in any state, shall oppose or prevent the carrying into execution such acts or treaties, the federal executive shall be authorised to call forth the powers of the confederated states, or so much thereof as may be necessary to enforce and compel an obedience to such acts, or an observance of such treaties.

10. Resolved, that a federal judiciary be established, to consist of a supreme tribunal; the judges of which to be appointed by the executive, and to hold their offices during good behaviour; to receive punctually, at stated times, a fixed compensation for their services, to be paid out of the federal treasury; in which

no increase or diminution shall be made, so as to affect the persons actually in office, at the time of such increase or diminution. That the judiciary so established, shall have authority to hear and determine, in the first instance, on all impeachments of federal officers, and by way of appeal in the dernier resort in all cases touching the rights and privileges of ambassadors; in all cases of captures from the enemy; in all cases of piracies and felonies committed on the high seas; in all cases in which foreigners may be interested in the construction of any treaty or treaties, or which may arise on any act or ordinance of congress for the regulation of trade, or the collection of the federal revenue; that none of the judiciary officers shall be capable of receiving or holding any other office or appointment, during the time they remain in office, or for years afterwards.

11. Resolved, that the legislative, executive, and judiciary powers within the several states, ought to be bound by oath to support the articles of union.

12. Resolved, that provision ought to be made for hearing and deciding upon all disputes arising between the united states and an individual state, respecting territory.

13. Resolved, that provision ought to be made for the admission of new states into the union.

14. Resolved, that it is necessary to define what offences, committed in any state, shall be deemed high treason against the united states.

15. Resolved, that the rule for naturalization ought to be the same in every state.

16. Resolved, that a citizen of one state, committing an offence in another state, shall be deemed guilty of the same offence, as if it had been committed by a citizen of the state, in which the offence was committed,

Curfory remarks on the federal constitution. Ascribed to Hugh Henry Brackenridge, esq.

IT is not my intention to enter largely into a consideration of this plan of government, but to suggest some ideas in addition to, and of the same nature with, those already made, shewing the imperfections and the danger of it.

The first thing that strikes a diligent observer, is, the want of precaution with regard to the sex of the president. Is it provided that he shall be of the male gender? The Salii, a tribe of the Burgundians, in the 11th century, excluded females from the sovereignty. Without a similar exclusion, what shall we think, if, in process of time, we should come to have an *old woman* at the head of our affairs? But what security have we that he shall be a *white man*? What would be the national disgrace, if he should be elected from one of the southern states, and a *vile negro* should come to rule over us! Treaties would then be formed with the tribes of Congo and Loango, instead of the civilized nations of Europe. But is there any security that he shall be a *freeman*? Who knows but the electors at a future period, in days of corruption, may pick up a man-servant, a convict perhaps, and give him the dominion? Is any care taken that he shall be of *perfect parts*?—Shall we, in affairs of a civil nature, leave a door open to lame men, bastards, eunuchs, and the devil knows what?

A senate is the next great constituent part of the government: and yet there is not a word said with regard to the ancestry of any of them, whether they should be altogether Irish, or only Scots Irish. If any of them have been in the war of the White Boys, the Hearts of Oak, or the like, they may overturn all authority, and make Shilelah the supreme law of the land.

The house of representatives is to be so large, that it can never be built. They may begin it, but it can never be finished. Ten miles square! Babylon itself, unless the suburbs be taken into view, was not of greater extent.

But what avails it, to dwell on these things? The want of a *bill of rights* is the great evil. There was no occasion for a bill of *wrongs*; for there will be wrongs enough. But oh! a *bill of rights*! what is the nature of a bill of rights? “It is a schedule or inventory of those powers which congress do not possess.” But if it be clearly ascertained what powers they have, what need of a catalogue of those powers they have not? Ah! there is the mistake. A minister preaching, undertook, first, to shew what was in his text; second, what was not in it. When it is specified what powers are given, why not also what powers are not given? A bill of rights is wanting, and all those things which are usually secured under it—

1. The *rights of conscience* are swept away. The confession of faith, the prayer-book, the manual, and pilgrim’s progress are to go. The psalms of Watts, I am told, are the only thing of the kind that is to have any quarter all.

The *liberty of the press*;—that is gone at the first stroke. Not so much as an advertisement for a stray horse, or a runaway negro, can be put in any of the gazettes.

3. The *trial by jury*;—that is knocked in the head: and all that worthy class of men, the lawyers, who live by haranguing and bending the juries, are demolished.

I would submit it to any candid man, if in this constitution there be the least provision for the privilege of shaving the beard? or is there any mode laid down to take the measure of a pair of breeches? Whence is it then, that men of learning seem so

ch to approve, while the ignorant
against it? The cause is perfectly
arent, viz. that reason is an er-
guide, while instinct, which is
governing principle of the un-
ght, is certain. Put a pig in a
e, carry it half a day's journey
ough woods and by-ways; let
ut, and it will run home without
iation. Could dr. Franklin do
? What reason have we then to
ose that his judgment, or that of
hington, could be equal to that
r. Smilie in state affairs?

ere it not on this principle that
are able to account for it, it
ht be thought strange, that old
nghton, of the Jerseys, could be
oodwinked, as to give his sanc-
to such a diabolical scheme of
ny amongst men—a constitu-
which may well be called hell-
. For if all the devils in Pan-
onium had been employed about
ey could not have made it worse.
l Mac-Laughlin, a neighbour
line, who has been talking with
Findley, says. that under this
stitution all weavers are to be put
death. What have these innocent
ufacturers done, that they should
er proscribed?

et other states think what they will
t, there is one reason why every
sylvania should execrate this
osition upon mankind. It will
e his state most probably the seat
government, and bring all the offi-
ce and cause a great part of the reve-
nt to be expended here. This must
e the people rich, enable them
ay their debts, and corrupt their
als. Any citizen, therefore, on the
aware and Susquehanna waters,
out to be hanged and quartered,
h would give it countenance.

shall content myself at present
these strictures, but shall conti-
them from time to time as oc-
a may require.

burg, April, 1788.

*Address to the minority of the con-
vention of Pennsylvania. By Tench
Coxe, esq.*

(Continued from page 245.)

NUMBER III.

Gentlemen,

IN my former letters, I endeavoured
to point out certain provisions of
the new constitution, and several
circumstances which must result from
the proposed frame of government,
and the state constitutions, which
might demonstrate, that there is no
ground to apprehend a consolidation
of the states, which shall join the de-
pending confederacy, into one go-
vernment.

An observation of the hon. mr.
Wilson's, has been adduced, among
other arguments, to prove, that des-
potism would follow such a general
government. I believe with him, and
with you, that such would be the
consequence of a single national con-
stitution, in which all the objects of
society and government were so com-
pletely provided for, as to place the
several states in the union on the foot-
ing of counties of the empire. But
permit me to ask you, gentlemen,
will such be the condition of the
states? Where is the county that can
independently train its own militia;
appoint its civil and militia officers;
establish a peculiar system of penal
laws; issue criminal process in its own
name; erect corporations; impose di-
rect taxes, excises, and duties; hold
lands in its own right; commence war
on any emergency; regulate descents;
prescribe the qualifications of elec-
tors; alter its constitution, or the
principles of its government; divide
itself into separate and independent
parts; join itself to another state;
issue writs for elections, and regulate
the same; enact inspection laws; erect
courts; appoint judges; commission all
its officers; create new offices; sell and
give away its lands; erect fortifica-
tions; and, in short, where is the coun-

ty in the union, or in the world, that can exercise in any instance independent legislative, executive, or judicial powers

Those three gentlemen, who withheld their names from the act of the federal convention, could not have apprehended the annihilation of the state governments, while that house was sitting, or they would, under the influence of such a fear, certainly have pressed for a bill of rights. It appears they did not think one so necessary, as to concert a single motion to obtain it: a conclusive proof, in my mind, that they saw no symptoms of a design to consolidate, in the framers of the plan, and that they had no apprehensions of the kind themselves.

The construction of the senate affords an absolute certainty, that the states will not lose their present share of separate powers. No state is to lose its voice therein, without its own consent. Governor Randolph justly observes, that the force of the constitution of any state can only be lessened by the absolute grant of its own citizens. Whatever therefore, is now possessed, will remain unless transferred by new grants. The state legislatures, too, being the immediate representatives and guardians of their respective constituents—and being the powerful creators of the senators, it cannot be apprehended, either that they will give away their own powers; or that they will choose men who are unfriendly to them: nor is it at all probable, that a senator would hazard the displeasure of the people, or the vengeance of so potent a body as a state legislature, by sacrificing their interests or powers. Rather may it be expected, that his interest and connexions in the state, will too partially attach him to it, to the injury of national objects; or that he may neglect general concerns from a de-

sire to please a legislature or a people who will be to him the source of honours, emolument, and power.

So independent will the state governments remain, that their laws may, and, in some instances, will be severer than those of the union. Treason against the united states, for instance, cannot be attended with confiscation and corruption of blood but by the existing laws of all the states, the unoffending families of attainted persons, stripped of all hereditary rights, and condemned to the bitter portion of extreme poverty, are left, without their friends and parents, to meet the trials of the world alone—an awful monument of the sovereign and avenging power of their native state. Let the representative or senator, who may meditate the annihilation of the government of his state, duly consider this before it be too late.

You apprehend, the power of congress to lay direct taxes, will tend to produce consolidation. But the several states possess that power all and by an early, wise, and faithful exercise of it, can always supersede the use of it by congress. For example: if ten thousand pounds were apportioned to Pennsylvania, to make up the interest on our foreign debt by the end of 1788, a tax for which would be laid in July; our legislature might proceed, in the most easy and expeditious way, to raise the money against the time when the federal government must necessarily proceed, and by paying our quota into the federal treasury, would fulfil the requisitions of the law. A federal government, that shall possess the least degree of policy or virtue, would never attempt to interfere with such honest, wise, and effectual arrangements of any state. It cannot reasonably be feared, that a federal legislature, chosen by the equal voices of all our citizens, the poor as well

he rich, will ever wrest from the hands of the people and states, who respectively appoint them, powers so wisely placed, and so honestly applied.

The check of the senate, on the appointment of officers, will exceedingly favour the preservation of the state governments. Let us suppose an expedition on foot, which requires a number of general officers, whom a president might be inclined to appoint from the state to which he belongs, or for which several persons are nominated, that are too partially attached to the federal government, or desirous of lessening the powers of the separate states. The senate can reject them all, and independently give their reasons to the people and the legislatures. That they will often do so, we cannot doubt, when we remember where their private interests, affections, and connexions lie—to whom they will owe their seats—to whom they must look for future favours of the same kind.

The lordship of the soil is one of the most valuable and powerful appendages of sovereignty: this remains in full perfection with every state. From them must grants flow: to them must be paid the annual acknowledgment, whether it be a mere compliance with form, in the rendering of a pepper corn, or a solid revenue, in the payment of a quit-rent. To them, also, as original and rightful proprietaries and lords of the soil, will the estates of extinct families revert.

Independent revenues and resources are indubitable proofs of sovereignty. The states will possess many of those which now exist, and which may hereafter be created. Taxes on state offices, fees for grants of lands, and various licences, tolls on rivers, canals, and roads, not being post-roads, rents of public buildings, escheats, the mighty fund of quit-

rents, and sales of lands—these, and many others are (exclusively of congress) within the power of the several states, besides their having access, in common with the federal government, to every source of revenue, but the duties on foreign merchandise and ships.

Impeachments within the several states will afford them opportunities of exerting the most dignified and awful powers of sovereignty. The people of every state, by their constitutional representatives, may impeach the public officer, however great or daring, who shall presume to violate their exclusive rights, or offend against the peace and dignity of their commonwealth; and may punish him, on conviction, by fine, imprisonment, or death, without any possible interference of congress.

But, gentlemen, the subject is inexhaustible. Every section in the federal constitution, as we peruse it, affords new ideas opposed to consolidation. Every moment's reflexion, on the operation and tendency of the proposed government, adds to their number. I will not therefore trespass longer on your time. I will rest the matter on your own good sense and candour, confidently trusting, that the removal of your apprehensions, on this important point, will render the new constitution more agreeable to you. Thinking, as you did, consolidation was intended, and would take place, and that it must produce a despotism, you would have been criminal in assenting to the plan proposed: but I will hope, that the consideration of this point, which we have taken together, will remove your fears, and open the door to comfortable hopes, rather than to apprehensions, from the great measure now waiting the fiat of the people of the united states.

A FREEMAN.

Letter from mr. Lambert, councillor of state and of the council-royal of finance and commerce, comptroller general of the finances of France, to mr. Jefferſon, miniſter plenipotentiary for the united ſtates of America, at the court of Verſailles.

Verſailles, Dec. 29, 1787.

I HAVE the honour, ſir, to ſend you a copy of an arret, paſſed in council, for encouraging the commerce of the united ſtates of America in France. I ſhall furniſh you with a number of others, as ſoon as they ſhall be printed.

You will therein ſee, that ſeveral conſiderable favours, not before promiſed to the American commerce, have been added to thoſe which the king announced to you, in the letter addreſſed to you on the 22d of October of the laſt year.*

If in the mean time any duties have been levied, contrary to the intentions of that letter, they ſhall be repaid, on ſight of the vouchers.

I have alſo ordered a verification of the facts whereon it was repreſented to you, that the deciſion of 24th of May, 1786, relative to the commerce of tobacco, had not been fully executed. Be aſſured, that if it ſhall appear, that engagements have been evaded, which were taken under the ſanction of the king, effectual proviſion ſhall be made for their ſcrupulous fulfilment.

You will learn alſo with pleaſure, that the meaſures I have taken, to prevent the interruption of the commerce of tobacco, have had full ſucceſs.

This commodity ſhall not be excepted from among thoſe to which the right of entrepot is given. The farmers-general ſhall have no prefer-

ence in the purchaſes: the proprietors ſhall be perfectly maſters of their ſpeculations---and free to export their tobaccos by ſea to foreign countries.

Meaſures only muſt be taken to prevent thoſe frauds to which the entrepot might ſerve as a pretext: and the chambers of commerce for the ports ſhall be conſulted, in order that the precautions neceſſary for this purpoſe may not be in a ſort incompatible with that liberty which commerce ought to enjoy in its operations.

Although the preſent ſtock of tobacco for farmers-general amounts to above three years conſumption, I have engaged that company to continue to purchaſe yearly, from the 1ſt of January, 1788, to the end of the year, fourteen thouſand hogſheads of tobacco, brought directly into the ports of France, in French or American bottoms; and to ſhew, at the end of every four months, that the purchaſes amount to four thouſand ſix hundred and ſixty-fix hogſheads.

As to the prices, you have been ſenſible yourſelf of the neceſſity of leaving them free: and this freedom of price was the principal object of the applications of the American and French merchants, when they complained of the contract of mr. Morris.

The determination then taken to force the purchaſes of tobacco, though at high prices, inſomuch that the farmers-general now find themſelves poſſeſſed of three years proviſion, ſhews that the intereſts of the planters and merchants of the united ſtates of America have ever been precious to the king.

The arret of council herein encloded, and the other regulations, which I have the honour of communicating to you, are a further confirmation of a truth tending ſo much to

NOTE.

* See American Muſeum, Vol. I. p. 224, of the firſt edition; and page 200, of the ſecond.

lengthen the bands, which unite the two nations.

I have the honour to be, with a very sincere and inviolable attachment, sir, your most humble and most obedient servant,

(Signed)

LAMBERT.

An act of the king's council of state, for the encouragement of the commerce of France with the united states of America.

December 29, 1787.

Extract from the records of the council of state.

THE king, desirous of encouraging the commerce of his subjects with the united states of America, and of facilitating, between the two nations, connexions reciprocally useful—having heard the report of sieur Lamart, counsellor of state, and of the royal council of finance and commerce, comptroller-general of finance, his majesty being in his council, has ordained, and does ordain, as follows :

I.

Whale oils and spermaceti, the produce of the fisheries of the citizens and inhabitants of the united states of America, which shall be brought into France directly in French vessels, or in those of the united states, shall continue to be subject to a duty of only seven livres ten sols the barrel, of five hundred and twenty pounds weight; and whale-fins shall be subject to a duty of only six livres thirteen sols four deniers, the quintal, with the ten sols per livre, on each of the said duties; which ten sols per livre shall cease on the last day of December, one thousand seven hundred and ninety: his majesty reserving to himself to grant further favours to the produce of the whale fisheries carried on by the fishermen of the united states of America, which shall be brought into France in French vessels, or in those

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of the united states, if, on the information which his majesty shall cause to be taken thereon, he shall judge it expedient for the interest of the two nations.

II.

The other fish oils and dry or salted fish, the produce, in like manner, of the fisheries of the citizens and inhabitants of the united states, and brought also directly into France, in their, or in French vessels, shall not pay any other nor greater duties than those to which the oils and fish of the same kind, the produce of the fisheries of Hanseatic towns, or of other the most favoured nations, are or shall be subject, in the same case.

III.

The manufacture of candles and tapers, of spermaceti, shall be permitted in France, as that of other candles and tapers.

IV.

Corn, wheat, rye, rice, pease, beans, lentils, flax-seed, and other seeds, flour, trees, and shrubs, pot-ash and pearl-ash, skins and fur of beaver, raw hides, furs and peltry, and timber, brought from the united states directly into France, in French vessels, or in those of the united states, shall not be subject but to a duty of one-eighth per cent. on their value.

V.

Vessels, built in the united states, and sold in France, or purchased by Frenchmen, shall be exempt from all duties, on proof that they were built in the united states.

VI.

Turpentine, tar, and pitch, the produce of the united states of America, and brought directly into France, in French vessels, or in those of the united states, shall pay only a duty of two and a half per cent. on their value: and as well the duties mentioned in this, as in the fourth article, shall be exempt from all addition of sous per livre.

I.

VII.

The exportation of arms of all sorts, and of gunpowder, for the united states of America, shall be always permitted in French vessels, or in those of the united states, paying, for the arms, a duty of one eighth per cent. on their value; and gunpowder, in that case, shall be exempt from all duty, on giving a cautionary bond.

VIII.

Papers, of all sorts, even paper-hangings and coloured papers, paste-board, and books, shall be exempt from all duties, on their embarkation for the united states of America, in French vessels, or in those of the united states, and shall be entitled, in that case, to a restitution of the fabrication duties on paper and paste-board.

IX.

The admiralty duties, on the vessels of the united states, entering into or going out of the ports of France, shall not be levied but conformably with the edict of the month of June last, in the cases therein provided for, and with the letters patent of the tenth of January, one thousand seven hundred and seventy, for the objects, for which no provision shall have been made by the said edict: his majesty reserving to himself, moreover, to make known his intentions, as to the manner in which the said duties shall be levied, whether in proportion to the tonnage of the vessels, or otherwise, as also to simplify the said duties of the admiralty, and to regulate them, as far as shall be possible, on the principle of reciprocity, as soon as the orders shall be completed, which were given by his majesty, according to the twenty-sixth article of the said edict of the month of June last.

X.

The entrepot (or storing) of all the productions and merchandise of

the united states, shall be permitted for six months in all the ports of France, open to the commerce of the colonies; and the said entrepot shall be subject only to a duty of one eighth per cent.

XI.

To favour the exportation of art hardware, jewelry, and bonnetry*, wool and of cotton, coarse woollen small draperies, and stuffs of cotton of all sorts, and other merchandises of French fabric; which shall be sent to the united states of America in French vessels, or in those of the united states—his majesty reserves to himself to grant encouragements, which shall be immediately regulated by his council according to the nature of each of the said merchandises.

XII.

As to other merchandises, not mentioned in this act, brought direct into France from the united states, their, or in French vessels, or carried from France to the said united states in French vessels, or in those of the united states—and with respect to commercial conventions whatsoever his majesty wills and ordains that the citizens of the united states enjoy in France the same rights, privileges and exemptions, with the subjects of his majesty, saving the execution of what is provided in the ninth article hereof.

XIII.

His majesty grants to the citizens and inhabitants of the united states all the advantages which are enjoyed, or which may be hereafter enjoyed, by the most favoured nations, his colonies of America; and moreover, his majesty assures to the fa

NOTE.

* This term includes bonnet stockings, socks, under-waistcoat drawers, gloves, and mittens, as sold by the bonnetiers.

izens and inhabitants of the united states, all the privileges and advantages, which his own subjects of France enjoy, or shall enjoy, in Asia, and in the seas leading thereto; provided, always, that their vessels shall have been fitted out and dispatched from some port of the united states.

His majesty commands and orders Le duc de Penthièvre, admiral of France, the intendants and commissaires de parti, in the provinces, the commissaires de parti, for the observation of the ordinances in the admiralities, the officers of the admiralities, masters of the ports, judges de traites, and all others, to whom it shall belong, to be aiding in the execution of the present regulation; which shall be registered in the offices of the said admiralities, read, published, and posted, wherever shall be necessary.

Done in the king's council of state, his majesty present, held at Versailles, the twenty ninth of December, one thousand seven hundred and eighty-seven. Signed,) Le Cte. de la LUZERNE.



new case, tried and determined, at a supreme court of law and equity, for the district of Newbern, North Carolina, on the 30th of November, 1787.

ON the course of term came on among other matters, a cause in settlement which had been of long and uncommon expectation, between William Bayard, and Elizabeth, his wife, against Spyers Singleton, for the recovery of a valuable house and lot, with a wharf, and other appurtenances, situate in Newbern—both the plaintiff and defendant admitted the title of the premises to have been in Samuel Cornell, esq. at and before the time when the independence of the state commenced.

The case appeared to be this—mr. Cornell, once an inhabitant of Newbern, leaving his family, together with the premises in question, and a variety of property therein, took shipping on the 19th of August 1775, and went to Great Britain, where he continued till some time in the latter part of the year 1777, when he came to New York, then occupied by a British garrison; and, as a British subject, went from thence and arrived in Newbern on the 11th of December, 1777, under the protection of a British flag.

His principal design in going to that state, at that time, was to take his wife and family with him, to reside under the British government, if he did not find our new government agreeable to his wishes. Not being pleased with the appearance of things, there, and thereupon preparing to leave the state, and to carry with him his wife and family, he executed, on board the vessel he came in, a deed to his daughter, one of the plaintiffs (under which they claim) for the premises in question, on the 19th of December, 1777.

This deed, for the purpose of execution, had been handed to him without a date, and being asked what date he chose it should bear, he hesitated, and said he would look at the copy of a bill which was then in his possession, which bill he understood to be on its passage in the legislature, for confiscating the property of all persons of his description, who should not, within a limited time, come into the state, and be made citizens thereof, which bill afterwards, in the same session, passed into a law. After looking at the aforesaid copy of that bill, he chose that the deed should bear date on the 11th of the same month, being the day he arrived in the harbour of Newbern; which deed was accordingly dated that day. After which mr. Cornell retired with his

family from the state; and from thenceforth, lived and died a British subject, under the British government.

Upon an issue of not guilty, under the common rule, the jury, consistent with the charge of the court, wherein all the judges gave their opinions, *seriatim*, but unanimously, found the defendant not guilty of the trespass and ejectment set forth in the plaintiffs' declaration.

This case was argued on both sides of the question, by counsel of the first eminence. And the cause chiefly turned on the point of alienage in *mr. Cornell*. For having, from his birth to the time of his death, been always a British subject, and having always lived under the British government, he owed allegiance to the king of Great Britain, and consequently, was never a citizen of that, or any other of the united states, nor owed allegiance thereto. For when there, at the time of the transaction aforementioned, he was under the protection of a British flag. That he was, therefore, in contemplation of law, as much an alien, and at the time of executing the deed, and from the time of our independence, as much an alien enemy, as if we had been an independent nation, for any number of years or ages, before the commencement of the war which was then carried on.

That it is the policy of all nations and states, that the lands within their government, should not be held by foreigners. And therefore it is a general maxim, that the allegiance of a person who holds land, ought to be as permanent to the government under which he holds it, as the tenure of the soil itself. That therefore by the civil, as well as by the common law of England, aliens are incapacitated to hold lands. For that purpose, the civil law has made contracts with aliens, void. The law of England, which we have adopted, al-

lows them to purchase, but subjects them to forfeiture immediately; and does not allow an alien enemy any political rights at all.

That the premises in question upon these invariable principles of law, could not, from the time of government commenced, have been held by *mr. Cornell*: because that in consequence of his owing no allegiance to the state, he had no capacity to hold them; and according to the letter of the law of the land they must have consequently been forfeited to the sovereignty of the state. That the act of confiscation in which *mr. Cornell* was expressly named—and, more particularly, the act which especially directed the sale of the very premises in question—must have been at least as effectual in vesting them in the state, as any office found according to the practice of England, can be for vesting any forfeited property in the king.

That the circumstances and limited privileges of persons, who were set out of the state under a particular act of the general assembly, are not applicable to this case. That the case in *Vattel*, of the majority of the inhabitants of any country deliberately dissolving their old government, and setting up a new one, neither in reason, nor in the most essential circumstances, any way similar to this case. That *Calvin's case* reported in *Coke*, does by no means reach the leading and characteristic circumstances of this case.

The defendant held under a title derived from the state, by a deed from a superintendant commissioner of confiscated estates. On the decision of this cause, in favour of the defendant, the remaining twenty-seven causes depending in the same court, arising upon similar, or less substantial grounds, were all swept off the docket, by nonsuits voluntarily suffered.

Hint to the farmers of Pennsylvania.

THE use of plaister of Paris is becoming very general in this state, as a manure for meadow ground, and for worn-out lands of all kinds; but unless some care is taken in the management of the lands afterwards, which this powder is sprinkled, will do more harm than good. In Germany, where it was first used as manure, it is a common saying, that it makes rich children but poor and children;” owing to the exhausting of the earth of its fertility, the plentiful crops it procures, in few years. To understand the meaning of this remark, I shall observe, that plaister of Paris, lime, and marle, only as medicines or cordials upon land. They give it a temporary fertility, which is always followed by weakness and barrenness afterwards, unless it be prevented by large quantities of dung or stable manure, which is the only proper food of the earth. To obviate the inconveniences of the use of the above mentioned cordials, it is absolutely necessary to give back to the earth, in dung, that is taken from it in grass or grain. The greater the crops produced by the plaister of Paris, the greater quantity of stable manure could be spread upon the land which produces them. If land, that has been recovered by the use of plaister of Paris, is treated in this way, its fertility will last to the end of time.



On the use of drift-sand as manure.

Mr. Printer,
I HAVE a meadow and part of a common field, lying near a brook that is often flooded; the bottom of the brook is a sharp gravel and sand, which, in a crooked course, are often worn up so as to impede the cur-

rent. I always had observed, that floods, so far from benefiting my meadow, were rather prejudicial, contrary to what is known and observed of some rivers, where the overflowings enrich and make the grass better and more in quantity. It being necessary to clear the brook, and great quantities of stuff being brought to land, I was induced to try what effect it would have, laid on my meadow, and my arable land, being then young grass, after white oats: accordingly, it was thrown first out as much as possible, near the banks of the brook, and, after lying a day or two to drain off the wet, it was carted both on the meadow and the clover. It acted on my clover in an extraordinary manner, producing a greater crop than I had ever had before; nor did it lose its effect on the wheat, which followed the clover, having nearly two sacks more on an acre than I ever had before. On my meadow it acted better the second year than the first; and this year was considerably benefitted by it. Thus I removed a troublesome nuisance; and in the room of it, procured a considerable advantage to my farm. I need not tell you, I shall constantly pursue the same plan, whenever the stream shall drive me down sufficient manure, as I now call it, for my purpose.

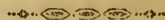


On the use of pulverised bones as manure.

I HAVE been exceedingly entertained with the result of an experiment I instituted last spring, whilst I directed my attention to the subject of manures. As I was one day walking in the field, I saw the bones of a cow that had died with a distemper, and which had acquired, by long exposure to the air and rain, a degree of whiteness, and had lost their original firmness—I ignorantly imagin-

ed, from their colour, that they might, by calcination, or burning, be reduced to lime. As it was winter time, and I had but little to do, I had them all hauled up to my house, where I made a large fire, and put the bones into it: they remained there red hot nearly three hours; they were now very white and easy pulverable, but had scarce any of the properties of lime. However, that I might not have all my labour in vain, I reduced as many of them to powder as would fill a half peck, resolving to try their efficacy as manure—I measured off three equal parcels of ground; on the first I sowed a mixture of grass-seed and the powdered bones (in the proportion of one bushel and an half to an acre;) on the second, I sowed the same with an equal mixture of plaister of Paris, and the bones, in the same proportion: and on the third I only varied the experiment, by using a little of the plaister of Paris, without addition; all the rest of the meadow was sown with the same seed, without any manure. After it had grown on all three to such height, as to make any difference discoverable, I took two farmers, who had long been used to mow good grass, to view my patches; they thought that there was a manifest difference between the middle patch and the two others—having, as they said, produced far the best grass: for my part, I confess I could not decisively conclude upon the superiority of either; but I have scarce any doubt, but that powdered bones, at least when mixed with plaister of Paris, would be found an excellent manure for meadow—and I fancy much cheaper than plaister of Paris. Before it can come into general use, it will require that its virtues be confirmed by future experiments, and on a larger scale; I therefore would be pleased that you would endeavour, to inform such of your friends of this experiment, as

are fond of agricultural enquiries have been told by a gentleman lately from Europe, that the earth of bone is not looked upon now to be of the nature of lime-stones, but that it only has a greater resemblance to plaster of Paris, than was before imagined: to understand the proof of what he said, required a knowledge of chemistry; but, as I have never studied that science, I did not request it of him.



Method of preventing the destruction of apple-trees by canker-worms.

THE insects, from which canker worms are produced are hid in the ground, near the root of the tree, not far from the surface, and make their appearance as soon as the snow is off, and the top of the ground soft, (which sometimes happens as early as February). The males have wings, and frequently alight directly to the limb, without touching the body of the tree; fortunately, the females have none, but are very clumsy bugs, and very easily stopped by tarring the tree. To do this with success, it is very necessary that the tar made use of, be of a proper consistence; if it be very thin it will be impossible to lay it on without first heating it; which makes a hard surface when cold, and suffers the bug to pass over with difficulty. Some endeavour to remedy this inconvenience, by mixing train-oil with the tar; but the best kind of tar, without oil, is far preferable: if this be exposed to the sun through the day, it will be sufficiently soft to be laid on with a brush. 'Tis best, the rough bark should be first scraped off with a hoe, or some other convenient instrument, and the tar put round the trunk about four inches wide; this operation must be repeated every day

in the state of the ground will permit them to move, till they have gone going up. It is not common that the weather permits them to stir in the middle, and often, not till the latter end, of March; when that is the case, and the weather continues warm, they will all be out of the ground in about fourteen days; but if they are commonly interrupted by snow or cold, it will generally be necessary to tar as many as twenty times, and sometimes more. The time that is generally chosen to be tared, is about two hours before sun-setting (which is the time the insects begin to move) and if not finished till four hours after the sun is down (after the first time) it is immaterial, for the tar that is already on the tree, warmed by the warmth of the sun, will be sufficient to stop them till that time. I am sensible there have been several objections to this method of taring, viz. that it is attended with trouble and expense; that it injures the tree, and, after all, that it is ineffectual. As to the expense, a barrel of tar is sufficient for an orchard; it will make an hundred barrels of cider; and four persons, in two hours, will be able to tar the whole once; allowing this to be repeated twenty times, the expense cannot be great; and experience has sufficiently proved that it does not injure the tree—I know of several orchards that have been tarred (as often as the worms troubled them) for twenty years, and could never perceive any injury done to them; on the contrary, I know of some others in the same neighbourhood, that have not been tarred, entirely destroyed by the worms. If a tree be thrifty, it will be necessary, some time in the summer following, to scrape off the tar, or make a few incisions through it, to prevent the bark from being confined. That has ever proved ineffectual, I believe no one can produce an instance,

where proper steps have been taken; but where it has failed, it has been owing to improper management or want of perseverance.

Portsmouth, February, 1788.



On the preparation and advantage of sumach berries.

IT has long since been the practice among the natives of this continent, to substitute the sumach berry for tobacco, and the secret was lately transmitted into Europe; in consequence of which it has become so universally esteemed by people of fashion and fortune, that very large sums have recently been offered to gentlemen of mercantile professions, for this valuable, much admired, and common production of nature. I am told by country farmers, who know its utility only as a dye, that it may be collected by the peasants and poor people for one guinea per barrel; if so, surely it would be a staple commodity, and one very much to be encouraged, as a remittance to different parts of Europe, when it is asserted from unimpeached authority to command a sum equivalent to five pounds, twelve shillings, this currency. As a farther encomium on the sumach, I can assure you, that the greatest connoisseurs in this, and many other respectable and populous towns in this state, give it the preference to the best manufactured Virginia tobacco; moreover, they publicly declare, that since they have smoked this ordinary berry, the fume of tobacco has become obnoxious to them in the highest degree. The easiest and indeed the only method to be pursued in preparing the sumach, to a state proper for smoking, is, to procure it in the month of November, expose it some time to the open air, spread very thin on

canvas, subsequent to which, dry it in an oven, one third heated; after you have completed the progress of cure thus far, spread it again on canvas, as before; there let it remain twenty-two hours, when it will be perfectly fit for use, and consequently in a state proper for exportation. Whoever will put this into execution, after its having arrived to a proper degree of maturity, and undergone the requisite process, will find it perfectly answer all the qualifications of the above-mentioned plant, so much in repute with gentlemen fond of amusing themselves with a pipe. All the other purposes intended to be answered by tobacco, are to enliven the spirits, and cause a copious evacuation of that juice, denominated, by medical gentlemen, saliva; all these ends are fully answered by the sumach; it will upon the first essay prove itself capable of producing the desired effect.

A native of America.

P. S. The sumach has been discovered to be possessed of very powerful antiseptic properties. Medical gentlemen of the first observation, have asserted and proved it manifestly a strong resister of putrefaction; it is frequently employed as a gargle in that species of cynanche, denominated maligna, or putrid ulcerated sore throat, and with very salutary consequences. *New York, 1788.*



Meditations on a tea-pot.

IT certainly may be excused, if men are sometimes visionary (the wisest and best being often so) and carry their speculations beyond the bounds of reality; and fanciful people, by right reason, can never be convinced of their mistakes. Pray, reader, be serious while I set down one of my reveries.

What is the world, said I to myself, but a *large china ware-house*? And what is man, who makes useful a part of it, but a *china pot*? St. Paul says, man is of earth, *earthly*; divines call him *tenement of clay*; philosophers; physicians assert that the stamina the human body are *mere earth*; chymists find, by an analysis, that *white earth* is all that remains of at the bottom of the crucible; preacher, in his elegant sketch anatomy and of our dissolution, presses it, *the pitcher* (or *water-pot*) broken at the fountain. But to proceed.

In this said *warehouse* we see three of the same materials and composition, though differently modified. These are ranged only in different orders; each in its own, some higher and some in more inferior positions, some of *finer clay*, and of more *gaudy outsides*, some made to honour and some to dishonour. But all are alike, as to *colour* and *material* of parts within; and both high and low are subject to the same disaster though not equally; the high be more out of reach; but those that are higher are liable to *greater fracture* and to be broken into smaller fragments; all alike must be mended the same ways and means, if mended at all; and when not to be mended must meet with one common fate, swept among the mass of things and forgotten.

As to *man*, the *tea-pot*, the *epitome* of this *warehouse*, who makes so respectable a figure in it, was he formed out of *clay*, like his brother? Was he not originally manufactured in the Asiatic country? Is he not equally brittle in his texture, as easily broken, and, when broken, does he not as readily return to, and re-form with *earth*, his first principle? And this analogy has been very happily and justly considered by one of

most celebrated poets who says, or
 her sings,
 Here *living* teapots stand—one arm
 “held out—

One bent; the handle this, and
 “that the spout.”

A *walking tripod* is mentioned by
 Homer, and two speaking *pots* by
 Sappho.

Does not a *teapot*, as well as man,
 resemble, contain the *four elements*,
 and water, earth and fire? Is it not,
 well as man, devoted mostly to the
 service of women, who, after those
 principles are exhausted, pay as little
 regard to either as to a *potter's common*
then vessel? Has it not been ob-
 served, that foreigners have been often
 more courted and had higher places
 assigned them, than our own natives?
 Is not every teapot, of external
 excellence, from the Indies, placed in
 the most conspicuous place, and more
 valued than any of our home commo-
 dities, though equally strong, useful,
 and handsome? What is a nabob, but
 a large rich china jar, or, if you please,
 a *teapot*, finely ornamented, though
 only for show in the dressing room
 of a lady? Is not his exotic dress,
 and the outside figures of an *India*
Tea, both alluring and engaging?
 What is a citizen, but a *teapot* of
 great magnitude, ready to receive,
 and as ready to pour out what he
 receives? What is a tradesman, but
 a *teapot* of *coarser ware*—and fit only
 for common use, who, when *cracked*,
 is treated with carelessness, and when
 broken (no uncommon incident to a
 tradesman) is counted as dirt, and
 assigned to oblivion, among the
 fragments of *plebeian earthen ware*?
 Is not a fine lady a vessel of *penciled*
china? Is not her reputation as *frail*?
 Can you solder up the flaws either of
 one or the other so completely as
 not to be pried into, and commented
 upon? If *white lead* repair the blem-
 ishes of a lady's face, does it not
 also repair the cracks and defects of
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china? And are not both liable to
 a failure in the *same* places, where
 they were mended before?

If then mortal man be a *teapot*, in
 this world of *china ware*, would it
 not be a laudable custom, to try suffi-
 ciently the ware we want, to be sharp
 sighted with regard to defects, before
 we buy—and wink wilfully at, or be
 blind to defects, after the *ware* is cal-
 led our own—suit as we ring—and ex-
 amine suspected vessels before we pur-
 chase them—and pretend not to see
 afterwards those parts that are cloud-
 ed with impurities? And might not
 this practice prevent that loathing
 and dislike we shew to *living vessels*,
 which for some time have ornamented
 our houses, and made a considerable,
 at least a *showy part* of our *furniture*,
 and not treat those said *living vessels*
 as we do a piece of *vulgar china ware*,
 suffering them to be soiled with dirt,
 and placed so low as to be insulted
 by every common broom?

No wonder, gentle reader, after
 those sublime meditations, that I
 should fancy myself A TEA-POT.



An oration in praise of ignorance. De-
 livered at the commencement in the
 university of Pennsylvania, July 4,
 1781; being the anniversary of the
 declaration of independence.

IT is an observation made by wif-
 dom, and it is also the declaration
 of experience, that “he who increas-
 eth knowledge, increaseth sorrow :”
 and yet so far are mankind from pay-
 ing any attention to it, that we find
 there are schools, academies, colleges,
 universities (and a Dutch divine, in a
 neighbouring state, has lately added
 a *gymnasium* to the list) erected for the
 purpose of increasing knowledge;
 as if our sorrows could not be suffi-
 ciently numerous, without the assistance
 of art. My intention is to destroy, if
 possible, these pests of society, and to
 point out the advantages which flow

from *ignorance*.—Ignorance! thou baln of life, and sorrow-soothing power! parent of hope, and enemy of care! on thee I call for inspiration, and invoke thine aid while I celebrate thy praise—display thy power, and attempt to prove, that all other sources of felicity are fleeting and fallacious.

Knowledge appears to have originated from envy, and that envy to have been seated in the *devil's* breast. “Ye shall be as *gods*, knowing good and evil,” was his artful insinuation to deprive our first parents of their happiness. Deceived by him, they ate “Of that forbidden tree, whose mortal taste

“Brought sin into the world, and all our woes.”

While Adam was ignorant, he was a *gentleman*: but knowledge reduced him to the necessity of labouring hard for a subsistence, and even *paradise* lost all its charms. The beauteous mother of mankind, who, in ignorance, was happy in the smiles of her husband, and had no care but to regale herself with the sweets of Eden, as soon as information entered her breast, became a disconsolate sempstress in the midst of the wilderness. She was ashamed of her knowledge; and she blushed. She was mortified by its consequences; and her tongue learned the language of insincerity, that it might deny the feelings of her heart. *This* was the origin of knowledge; and these were some of the first attendants upon improvement in science! How much happier had been *our* lot, had our first parents obeyed the dictates of nature, and remained in ignorance! I say *obeyed the dictates of nature*; for she clearly teaches us to seek for happiness in ignorance alone. Need I produce a proof of this? Observe your *children*: are they *born* scholars? no; nor do they wish to be such. See, with what sportive mirth they play around the par-

lour while indulged in ignorance; but the moment you attempt to tear them, their countenances change, their swelling bosoms heave a dreadful sigh—and the tears which trickle down their cheeks, tell you the sorrows of their hearts. How does holiday enliven their spirits, a what raptures do they discover, the instant their pedagogue dismisses them—Never did town-meeting resound with louder acclamations, on passing resolutions for the regulation of commerce, than the street does upon their release from the school room. In these young minds, there is no disguise: these children act themselves, and the plain language of their conduct is, that learning is repugnant to nature, and that we destroy their happiness, by adding to their knowledge. *Mamma* too will help to vindicate the truth of our assertion; for although she feels not the force of the impression, yet she knows its operation on the child. If master misbehave, she threatens him with being sent to school: if he will not go to sleep, *Mr. Birch*, the tutor, is to be sent for. What is this, but acknowledging that both the institution and the instructor are enemies to our happiness?

Thus, most respectable audience, you see that nature speaks the same language both in young and old, and that in vain do we seek for comfort, while science is cultivated among us.

The history of the church will furnish another proof that knowledge is prejudicial. What sweet tranquility did she enjoy in the days of ignorance!—how lovingly did christians go to heaven together! but no sooner had those incendiaries, Luther and Calvin, inspired the vulgar with a thirst for information, than fire sword, and persecution raged with relentless fury, and swept off millions of mankind. Such bitterness of spirit immediately took place, as made

each party fix the fate of its opposers, and doom them to perdition: or could the father of the church put an end to the miseries of his beloved children, though he was armed with all the terrors of an inquisition. The translation of the scriptures into a known language baffled all his attempts to restore their former ignorance, and produced such an endless variety of sects and opinions, that have ever since disturbed the peace of society.

Our passions furnish a striking hint in favour of ignorance; for why should they so strongly impel us to dissipation, if knowledge, to which it is an avowed enemy, were of any use? Is not their language the same with that of Solomon (who knew a great deal, for the day in which he lived) in much wisdom is much grief; and he, that increaseth knowledge, increaseth sorrow?"

And what, after all, is this mighty thing, called knowledge, to attain which we must throw away several of the best years of our lives, and endanger our constitutions, by exposing ourselves to the inclemency of every season? Why, forsooth, the art of using uncommon words, to excite the admiration, and perplex the understandings of common people, without conveying one uncommon idea. What advantage can be derived from physicians using the words mastication and deglutition instead of chewing and swallowing; or the lawyer's covering, with the terms replication, rejoinder, demurrer (and others equally insignificant) the arts by which he conjures your money into his own pocket? Indeed, I must confess, I have heard of one instance, in which the use of what he vulgar call a hard word has been of service:—A divine once mentioned metaphysics in his sermon, and a woman in the congregation was very happy upon hearing it; for she sup-

posed him to mean, that the gospel was good for both *meat* and *physic*: but for the consolation this afforded, she was more indebted to her ignorance, than to any thing else.

Of all kinds of learning, philosophy conceals the best fund of stupidity under a shew of very great knowledge. What does the professor of this science mean by his hydrostatics, pneumatics, optics, astronomy, &c.? Why, truly, to inform you that 'water will not run up-hill—that the wind blows sometimes one way, and sometimes another—and that there are stars in the firmament, whose distance and size he knows nothing about.

It will be worth while to attend a little to the pursuits of philosophers. See the great sir Isaac Newton, gravely sitting over a tub of water, with a pipe in his mouth, blowing air-bubbles; and at other times dropping pebbles from the top of St. Paul's steeple, both which a boy of twelve years old could have done full as well as he: but this is philosophy. I have heard of his being so busily engaged in thinking of some philosophical tricks, that he made use of a lady's finger instead of a tobacco stopper: and yet this same sir Isaac, (with all his nonsense and inattention to politeness) is said to have been a good scholar and a great philosopher. Follow the virtuoso; see what a dance a butterfly can lead him; and with what care he saves a moth, which all the world besides himself would wish should be destroyed: he is a *philosopher*.—There's another.—A man who thinks of nothing under heaven but *antiquity*:—he has a large estate in ancient coins, and yet can hardly find money enough to go to market:—he would give an hundred guineas (if he had them) for the *male tick*, which was preserved in Noah's ark, and thrice that sum for an authentic copy of the deed by

which St. Peter conveyed the lands of infidels and heretics to the pope. Such are the sons of science!—Blessed ignorance! thy votaries know no such follies—no such toils as these.

Men of education are constantly haranguing on the advantages of learning; and in many parts of the world, have had much success: but it must give infinite satisfaction to every lover of his country, to see that the good sense of America will baffle their attempts amongst us. Here no man meets with respect on account of his knowledge; and the teachers of the sciences (those of dancing hair-dressing, and millinery excepted) are held in the utmost contempt, and ranked with the lowest of the people. Should our present fondness for ignorance continue, America may become the Elysium of the world. To encourage us in this expectation, let us briefly review some of the advantages we have already derived from it.

All the skill of British financiers has only served to saddle their nation with a debt of two hundred millions of pounds sterling; while America, ignorant of the subject, has reduced a debt of two hundred millions of Spanish milled dollars to less than five.

Again: while we remained ignorant of the true nature of a circulating medium of trade, our legislators could stamp what value they thought proper, upon a scrap of paper:—it became a penny, a Spanish milled dollar, a pound, a half johannes of Portugal,—or any thing else at their pleasure: but the moment we were informed of its intrinsic worth, the imaginary value vanished, and the rag dwindled into its original insignificance.

Here we have the most incontestible evidence, that ignorance exceeds knowledge at least in the ratio of one hundred and seventy-five to one.

Many other instances of the benefits we have received from igno-

rance might be enumerated; but these shall suffice, that I may not impose upon that patience to which I am indebted for so indulgent an attention.

Upon the whole, whether we form our judgments from the declaration of the wisest of men, from the dictates of nature, or from our own experience, we may conclude, that ignorance is preferable to knowledge and should any man be so unfortunate as to possess the latter, it will be a mark of prudence in him (a Solomon judiciously suggests) to conceal it.

Since then all knowledge is at best but vain—

Since it not lessens, but increase pain—

It is most evident, we may conclude
That in sheer ignorance consists all good;

That to be happy, we need know no more

Than (nor so much as) two and two make four:

And therefore, as they care for nought that passes,

The happiest creatures in the world are asses.



To the printer of the American Museum,
SIR,

If you think the following deserves a place in your publication, please to insert it. It is one of several pieces, similar in complexion, which were written, chiefly, in the course of the late war, as moments of leisure occurred to the author. They were intended for his private amusement only—not wantonly to sport with the feelings of others, but to habituate his mind to the abhorrence of vice, and the contemplation of virtue. Whatever severity, then may appear in the composition, it must be remembered, that the vices and follies he paints,

are copied from *real* life, and intended as shades to raise virtue on the foreground of the imagination. Most of the facts introduced, are so generally known, not to be remembered. Some of the characters he drew, have since lost their originals; of which number, is the following. But their vices survive—in the memory at least: *Them* he attacks, to root out the pane of example, and to guard us against the choice of improper men. As it is sometimes necessary to dissect the dead, for the benefit of the living, the writer hopes for the indulgence of the candid, notwithstanding the adage, “*de tuis nil nisi bonum.*” T.

Philadelphia, March 31, 1788.

Advice to the inhabitants of the united states.

“*A satire's smile is sharper than its frown.*”

AS the growth and disposal of offices, will, probably, be among the fruits of the present revolution, a few words of advice how to court and merit them are the object of the following lines. To such of you as shall aspire to the favours of the country in which you live, they are humbly offered as the result of reflexion drawn from experience.

The old-fashioned mistake, that merit is the criterion for public favours, is here exploded. Let no man, therefore, be he native or foreigner, who looks for preferment, confide in an axiom so delusory, and which, like the *ignis fatuus*, can only dazzle to mislead. The dictates of the conscience are too *stale* and arbitrary to be relished by a *new* and *independent* nation. As to gratitude, it ought never to be mentioned, but to fill up a vacuum in conversation; and then you must be sure to heed it, as the excrescence of a principle unfriendly to liberty. The ends of unlimited

freedom are only to be obtained, by following impulses that are voluntary: all others are fetters on the will and dignity of a free people.

Are you a foreigner, and have you been arraigned at the bar of justice abroad*?—despair not: you have come to a country tenderly disposed towards the frailties of your nature: *humanum est errare*: any *faux pas* you may have committed there, will render you not the less worthy here. It will rather serve as a foil, to set off your brilliant qualities. Burnish them with a sprinkling of modern patriotism, and you may count upon greatness and fortune—if not fame. Should prudence guide your choice of local situation (and here is a capacious field for the exercise of discernment) particular traits of character may recommend you to the virtuous suffrages of the place, and perch you on the pinnacle of state-power. A seat on the federal floor may next reward your just expectations, and post you in the road to wealth. *Consequence*, I am presuming, you have already acquired: but *wealth*, you know, is the crowning prize, for which every good republican ought to contend. Should, however, your address *there* happen to miscarry (a thing not impossible, where other claimants are to be gratified) take courage! a liberal state will not fail to blunt the poignancy of disappointment by an increased attention to your deserts at home.

As there are scoundrels in all countries,—perhaps, on your return, some pert busy fellow, pretending to know more of you than he ought, may dare to talk to you of a *cordons* or sneeringly utter in your ears, the *escapes*

NOTES.

* The printer has taken the liberty of omitting the name of a deceased character, whom the author here has in view. † A halter.

they have had: but do not be dismayed; he only envies your good fortune. A smart repartee, though it may not discomfit your enemy, will carry *you* through with *eclat*—such as, ‘a mile is as good as a mile,’ or the like. This will entitle you to the laugh—and “let *him* laugh that wins,” you know. Besides, you are not to be told, what every *pettifogger* knows, that “*possession* is equal to eleven points in law;”—you need not, therefore, be over-scrupulous as to the *simple tenure* of your ears: if you do not hold them *de jure*, they are yours, nevertheless, *de facto*; and you can give the *special matter in evidence*.

I will suppose you once more in the chair of government: observe, then, that occasional inebriation, especially if prudently administered in the morning, gives a flow to the animal spirits, and quickens the digestion of fancy: it curbs the disagreeables intruded from the pillow, and will add a dash of spirit and brilliancy to your actions during the day. It is a precaution which, so far from impairing your pretensions with a discerning public, must render them more conspicuous, and enhance their value. If your person be maimed (no matter how) and entitled to a crutch, you may, now and then, brandish the latter, and exercise it to advantage, over the heads of your council*. It will exhibit a *striking* proof of the *weight* of your *understanding*, in *civil* affairs, and establish your reputation for *discipline*, as *commander in chief*.

There is hardly any circumstance, however small in itself, that an inventive genius may not turn to account; and who knows what honours you may reap from the free exercise of yours, should fate kindly spare your valuable life!

The dignity of the state over which

you preside, will require a table for those who may deserve the honour of your card. You will there enjoy privileges of indefinite extent, controllable only by good manners—which, *ex officio*, you must be the judge. Should the present state of warfare throw in your way a captive officer, his situation will doubtless command your generous attention and procure him admission to your hospitable board. The glass will necessarily circulate after dinner, warm the heart, and give a liberal turn to the conversation. If your captive guest be an Irishman, he will be apt to pique himself upon having *you* for his countryman: but cut his presumption short, by an immediate recurrence to your respective situations—he a *prisoner*, and perhaps, a *subaltern* officer; you a *governor* a *large*, and *commander in chief*!—It would be a further proof of your consequence and good breeding, if you were to blackguard the British king, and all his *adherents*—*pointing* your speech with some such acclamation as, “I heartily renounce Ireland for ever.” Perhaps he may give you the retort courteous, as for instance, “in the name of all Ireland, by Jafus, I humbly *thank* you:”—but you can easily silence such impertinence, by ordering a constable † to lay the offender by the heels. Should he be so rude after this as to return your politeness and hospitality with a challenge, you can parry his thrust, without coming to points: retire behind your rank; tell the rascalion to send you his *king* to receive satisfaction; for that your dignity would be insulted, by entering the lists with a *subject*. This will confound your antagonist, and leave you in the quiet possession of a *whole skin*.

NOTE.

NOTE.

* This happened at Augusta.

† A cant term, well known in drinking.

Then O, when the sun-beams reflect from thy stream,
In thy neighbourhood may I remain!
I'll sing of my absent AMANDA's esteem:
And thou shalt re-murmur the strain.

Should any, inquisitive, ask whence belong,
The soft flowing sounds they have heard;
O tell them, sweet river, 'tis AROUET's song;
The plaintive, the sorrowful bard.



Elegy.—Sacred to the manes of Philander.

Written on a rainy tempestuous morning.

LO! clouds on clouds, obsequious to the blast,
With spreading gloom the face of heav'n o'ercast,
Down pours the rain and thirsty earth receives
The humid burden—pattering from the eaves,
Whilst her dark wing, black Melancholy spreads
O'er ev'ry joy, and wraps the mind in shades.

Come, heav'n-born muse, for tragic sweetness known,
Where high thou shadow'st thy cœrulan throne;
In this dark hour to lend thy vot'ry aid,
From brighter realms—descend, celestial maid.
Since none like thee, among the tuneful nine,
Can melt the soul in sympathy divine :
Since none like thee, beyond the grave can give
The poet's or the patriot's name to live.
Lo, rais'd by thee, the mounting bard would soar,
Beyond all view—sublime in tragic lore :
O come ! the great immortal thought inspire,
That ev'ry line may glow with native fire.
Then whilst I sing, for ever sacred be
The lays,—**PHILANDER**, for I sing of thee,
Thee with dire frowns the ruthless fates beheld,
When o'er thy bark the belling canvas swell'd ;
Consign'd by them, **BRITANNIA**'s sons enslave
Those freeborn youths who press th' Atlantic wave.

" Oh could I fall," th' undaunted brave might say,
 " In arms of conquest and the face of day :"
 " Could I expire," the peaceful swain might cry,
 " My friends around me, all my kindred by ;
 " Then would grim death his friendly aspect wear,
 " Nor all his terrors shake my soul with fear."

But ah! PHILANDER no such blessing knew;
No weeping kindred took their last adieu:
All unbemoan'd th' aerial spirit flies,
And swift revisits its paternal skies.

When the tall oak, amidit tempestuous gloom,
From heav'n's own thunder shades the lowly broom,

If o'er its head the livid lightnings burst,
Rive the big trunk, and level it with dust—
Each shrub laments the fall—and, full in view,
A mournful chasm—tells them where it grew:—
So fell *Philander*: and where once he stood,
We long shall mourn the generous and the good.

Ye sons of *Pæan*, by your parent led,
Weep round his grave, and mourn your brother dead.
Like you, he once approach'd, with sweet relief,
The house of sickness, the abode of grief,
With gen'rous ardour, striving to impart
The heav'nly blessings of the healing art.

With no rash tread, ye passers-by, presume
To print the ashes on *Philander's* tomb:
But, ever sacred, may the lone retreat
Be solitude's supremely-awful seat:
Round all the place, may mournful cypresses grow,
And death's dread angel keep his charge below.



Fragment of an epistle to a friend, who had desired the author to write some
acrostics.

MUST still such themes the poet's verse profane
Will still the shade of Addison refrain?
Ah! no—before my sight the spectre stands,
And waves my sentence in his deathless hands;
O much lov'd friend, my valu'd *Hill*, no more
For such low themes th' unready bard implore;
Direct the muse to some far nobler view,
Some heaven-born theme, some subject worthy you:
Then would the bard with far sublimer fire,
Raise the bold song, while heav'n and you inspire,
If, soaring high, in epic verse he sings
The fate of empires, and the fall of kings;
How great Achilles, furious to destroy,
Withstood the force of heaven-defended Troy;
'Till o'er her turrets wav'd th' aspiring flame,
And left all Illium nothing but a name;
Or, Maro like, on Pegasean wings,
In friendship's cause, attune the trembling strings!
How Nisus lov'd—how Euryalus burn'd,
And flame for flame the virtuous youths return'd.
Illustrious pair! by mutual fates ally'd,
Nor death's grim king their union could divide;
E'en the stern soul of great Pelides mov'd,
Lov'd by his friend, by his Patroclus lov'd.

Yet, if no spark of glowing genius shines
Thro' the long train of these increasing lines—
For friendship's sake, the humble verse receive,
Your bard's presumption, and his lays, forgive;
Once read him through; and, if your patience tire,
Condemn the culprit to an instant fire.

Foreign Intelligence.



Vienna, February 16.

AN express has brought intelligence that pacha Mahnud has gained a complete victory over his enemies.

A blow has been already struck. No sooner was the declaration of war made known in the army, on the 9th of February, than general Devins, commandant of the troops in Croatia, commenced his operations by the attack on the fortress of Dresnick.

The execution of this enterprize was confided to col. Poharnik, of the regiment of Carlstadt. He first summoned the Turks to surrender, with an assurance, that, if they gave up without resistance, they should meet with the protection of his imperial majesty. To this summons, their only answer was, the discharge of their artillery! The colonel made a similar reply, from the mouths of his cannon with such effect, that the whole place was soon in a blaze, and the garrison almost entirely destroyed.

In another quarter, the imperial troops have not experienced the same success. Lieutenant-colonel Kefnovick passed the Unna, to attack the Turkish castle of Dubiza: in this project he failed, and met with some loss.

Francfort, Jan. 25.

The Ottomans have formed four great armies: one, in Servia, of 100,000; the second, in Bosnia, of 60,000; the third in Bessarabia and Moldavia, where the chosen artillery are; and the fourth, in the Crimea, of between 20 and 25,000 men.

The Russians were preparing to lay siege to Oczakow, when the last letters came away.

Hague, Jan. 29.

We have accounts from Paris, that eight magistrates have refused to assist at the sittings which are to precede the restoration of the protestants to their civil rights; and we also learn, that they are not very well pleased at Versailles, with the flattering reception M. de Calonne has met with in London.

Dublin, January 29.

Extract of a letter from Louvaine.

By the late accounts at Antwerp, it appears that 16,800 Dutch have passed that city in their way to France; 216 left this city, last Tuesday morning, to go to Lisle.

London, Jan. 1.

The fugitives from Holland, it is said, have purchased land in France to the amount of 1,500,000 florins.

Feb. 1. Yesterday lord George Gordon appeared in the court of king's bench, to receive the sentence of the judges, in the case of a libel, of which he had some months before been convicted—His lordship made both in dress and in aspect, an appearance truly Mosaic.—His beard extended a considerable way from his chin, and over his face; and his countenance seemed solemn and sanctimonious.—He received the sentence of the court with much apparent humility; which was,

For writing and publishing the prisoners' petition, to be imprisoned in Newgate, for three years.

For writing and publishing the libel on the minister of the French court, to be imprisoned in the same jail for two years, to commence from the expiration of the first sentence.

To pay the crown a fine of 500l.

To enter into a recognizance, at the expiration of his imprisonment—himself in 10,000l. and two sureties in 2,500l. each, for his good behaviour, for 14 years.

Lord George was quite silent; he was dressed in a drab-coloured coat; his hair, as usual, undressed; his beard of a considerable length.

By the accounts which have been published in Paris, of the population of that city for the year 1787, it appears there were 20,378 baptisms, 8,139 deaths, 5912 infants found, 505 marriages, and 107 who took the veil; so that there were 2239 baptisms more than deaths.

Feb. 2. The protestant edict is at last carried in France, there being only eight members who opposed it; they were the archbishop of Paris, the bishops of Chalon and Beauvais, two abbés, M. M. Givis, d'Epresmenil, and St. Vincent.

Feb. 4. General field marshal Laudon, well known for his military talents, and determined bravery in the war of 1737, undertakes, at the wonderful age of 70, the conquest of Moldavia: while the emperor, in person, takes upon him the command of the army in Hungary, consisting of 60,000 men, which being divided into different bodies, will attack the Turks in Servia, Bulgaria, and Bosnia.

A third army will be stationed in Wallacia, which, with the Russians, who are to join it, will amount to 50,000 men, and can, with great facility, act in concert with the grand army of the empress, which is already on the borders of the Ukraine, and of Podolia.

It is resolved to enter Moldavia by two armies, at two different places, at the same time: the Austrian forces will penetrate into it by Buckowine, and the Russians by the Polish Ukraine.

A letter from Vienna, dated Jan. 10, says, "it was reported, some days ago, that a fresh attempt on Belgrade had been made; but we have reason to doubt it; as the accounts from Esclavonia, of the 12th December, made

no mention of it. They nevertheless confirm the report that the imperial troops there are making dispositions, which seem to portend some grand stroke to be struck soon, which caused it to be said yesterday, that something important had happened, on the 2d instant, in those parts."

Feb. 15. Mr. Adams, the American ambassador, takes leave of our court, previous to his return home, in the course of next week.

Feb. 16. This day is the commencement of Mr. Hastings's trial, on a charge of high crimes and misdemeanors.

All those who had contributed to the defence of Utrecht, are condemned to exile, for three years, from that province.

March 1. An official notice was delivered on Sunday the 10th instant, at three P. M. by prince Kaunitz, to all the foreign ministers, at Vienna, that the emperor had found himself obliged to declare war against the Turks; and that he hoped, in a cause so good, that the vows and wishes of all Europe would accompany him in his endeavours against the enemies of christianity.

Couriers were dispatched to Versailles and Petersburg: and, on the 27th last month, orders were sent to baron Herbert, at Constantinople, to declare war. It is therefore highly probable that that internuncio is lodged with the Russian minister, in the Seven Towers.

March 6. By a gentleman who arrived yesterday from Germany, we learn, that an account had arrived at Vienna, of the imperial troops having invested the important city of Belgrade, which, it was expected, would make a very powerful resistance.

The empress of Russia has now avowed her intention of driving the Turks out of Europe, and of giving the sovereignty of that part of the Ottoman dominions to the grand

duke's second son, who is to hold it as a tributary prince to Russia.

Since the emperor's declaration of war against the porte, the French court have, it is said, sent a notification to our government, informing them, that by a treaty, subsisting between them and the Turks, they are under the necessity of supplying the latter with six ships of the line.

A letter from Bourdeaux, dated Feb. 18, says, "the public discontents in this city do by no means decline; nor are they likely to be settled, till the affairs of the parliament are put upon what we now conceive to be a constitutional footing. The rage of absolute monarchy is rapidly declining; and, though a Frenchman will probably never lose his favourite maxim of *vive le roi*, yet we begin to conceive that slavery is a badge too galling for any but the most abject of the human species."



AMERICAN INTELLIGENCE.



Boston, March 22.

In a revenue bill which passed the hon. legislature yesterday, the clauses in the act heretofore in force, laying a duty on advertisements, writs, executions, and deeds, not registered in six months, were repealed.

Newport, (R. I.) April 3.

The following is the result of the proceedings in this state on the new constitution:

Newport, Providence, and Westerly, did not poll, but gave instructions to their deputies in general assembly, to have the constitution referred to a convention, where it could be legally and properly determined.

In Warwick and Greenwich, no yeas were given, the federalists having entered a protest against the al-

teration of the mode of decision, as legal and unprecedented.

In Bristol and Little Compton there was a majority of votes for the new constitution.

The other towns generally negatived the constitution; their majorities will appear larger, as the federalists declined giving their votes town meeting, upon a question that is resolvable only by a convention of the people.

It is therefore presumed that the legislature will consider this act, entering the mode of decision, as abetive and nugatory—and not offer the united states and to the world partial decision on the constitution, being the voice of the people of the state—for it is an indisputable truth that the nays returned, do not form a majority of the freemen and freeholders of the state.

New York, April 1.

By order of congress, the postage of letters is reduced 25 per cent.

April 12.

Intelligence from the state of Franklin.
Transcript of a letter from general Russell, dated 9th of March, 1788.

"You have heard that governor Sevier had besieged col. Tipton's house, and had offered terms of capitulation; which being rejected by Tipton, he sustained a fire from the governor's whole body of troops without damage to any in his house. Two women were sent out in the day time on some occasion, one of whom received a ball through her shoulder. The experienced general endeavored to shew his abilities in war, attempted to fire Tipton's house, by a moving battery, which he employed early one morning. Col. Maxwell stole a cautious march, surprised the governor and his party, by the first fire, and forced the governor to retreat without his boots. It seems that

great was intended to gain an eminence, not far from the encampment; which being recovered by Sevier's party, they returned some shot Maxwell's men, killed one, and wounded one or two more; but the force of the latter charging with muskets, soon dislodged Sevier, and effected a total defeat; we learn that 12 are dead of their wounds, and that the governor was seen 15 miles from home, barefooted. The last account says, both parties are raising more men: how it may end, God only knows"—

April 24. A hog was lately killed near Mr. Harrington's slaughter-house, Middletown, which weighed, including the whole of the lard, 602 pounds.

A letter from New Providence, dated March 27, says, "these islands since the peace, have been in a continuous uproar, by a violent and rancorous dispute between the inhabitants and the American refugees, the latter considering themselves entitled to the greatest share in the affairs of government, and every other indulgence, to the total exclusion of their more honest fellow subjects. As soon as Lord Dunmore arrived, they, in a tumultuous manner, and in terms far from polite, addressed, or rather required of him, immediately to dissolve the house of assembly, because some of the old inhabitants were in the legislature, and set forth, that their respectable corps were not sufficiently represented, not forgetting to remind his lordship of their unbroken loyalty during the American contest, and the great sacrifice of property they had made, in support of the royal cause; his lordship has thoroughly investigated the affair; and the malignity and turbulent spirit of these fugitives appearing fully to his lordship, he has refused to comply with their unreasonable requisitions; and, to all their long ad-

resses and harangues, both in and out of the legislature, he has given them the following laconic answer: "I do not think it expedient for his majesty's service, to dissolve the present house of assembly."

A letter, dated, Lake Champlain, March 18, 1788, says, "Lord Dorchester has ordered the people, ten miles on this side of the lines, to be enrolled with the militia of Canada—they are to choose their officers next week, are to be governed by the laws of that province, and protected by the same. As soon as the ice on the lake breaks up, the ship Maria is to come up the lake, ten miles, to keep up order and regulation, if necessary."—

April 25. As exaggerated accounts of the late riot in this city have been circulated through different parts of the country, we have obtained the following particulars of that unhappy event.

During the last winter, some students of physic and other persons had dug up from several of the cemeteries of this city, a number of dead bodies, for dissection. This practice had been conducted in so indecent a manner, that it raised a considerable clamour among the people. The interments, not only of strangers and blacks, had been disturbed, but the corpses of some respectable persons were removed. These circumstances most sensibly agitated the feelings of the friends of the deceased, and wrought up the passions of the populace to a ferment.

On Sunday, the 13th inst. a number of boys, we are informed, who were playing in the rear of the hospital, perceived a limb, which was imprudently hung out of a window, to dry: they immediately informed some persons—a multitude soon collected—entered the hospital—and, in their fury, destroyed a number of anatomical preparations; some of which, we

are told, were imported from foreign countries—one or two fresh subjects were also found—which were interred the same evening. Several young doctors narrowly escaped the fury of the people; and would inevitably have suffered very seriously, had not his honour the mayor, the sheriff, and some other persons, interfered, and rescued them, by lodging them in jail. The friends to good order hoped that the affair would have ended here: but they were unhappily mistaken.

On Monday morning, a number of people collected and were determined to search the houses of the suspected physicians. His excellency the governor, his honour the chancellor, and his worship the mayor, finding that the passions of the people were irritated, went among them, and endeavoured to dissuade them from committing unnecessary depredations. They addressed the people pathetically, and promised them every satisfaction which the laws of the country can give. This had considerable effect upon many: who, after examining the houses of the suspected doctors, retired to their homes. But, in the afternoon, the affair assumed a different aspect. A mob, more fond of riot and confusion, than reliance upon the promises of the magistrates, and obedience to the laws, went to the jail, and demanded the doctors who were there imprisoned. The magistrates, finding that the mild language of persuasion was of no avail, were obliged to order out the militia, to suppress the riot, to maintain the dignity of government, and protect the jail. A small party, of about eighteen armed men, assembled at three o'clock, and marched thither—the mob permitted them to pass through, with no other insult than a few volleys of stones, dirt, &c. —Another party, of about twelve men, about an hour afterwards, made a similar attempt, but having no

orders to resist, the mob surrounded them, seized, and destroyed their arms. This gave the mob more courage—they then endeavoured to force the jail, but were repulsed by a handful of men, who bravely sustained an attack of several hours. They then destroyed the windows of the building with stones, and tore down part of the fences. At dusk, a party of armed citizens marched to the relief of the jail; and, as they approached it, the mob, huzzaing, began a heavy fire with stones, bricks, bats, &c. Several of this party were much hurt, and in their own defence were obliged to fire; upon which three or four persons were killed and a number wounded. The mob shortly after dispersed.

Kentucky, April 4. It is with most sensible concern, we announce to the public, the capture of the boats, on the Ohio, near the mouth of the Miami, by the savages. Familiarized, as we have been, for several weeks past, to murder, and robbery at almost every point of our frontiers, the sympathy of all ranks has been excited in an extraordinary degree by this deeply affecting catastrophe. Among the passengers on these boats, it is with great regret we mention Samuel Purviance, esq. of Baltimore-town, mr. Ridout, of Maryland, mons. Ragaut, and two other French gentlemen, one a mineralist, the other a botanist, destined to explore the natural products of this country, a mr. Pierce, of Maryland, and a mr. Ferguson, a trader; besides these gentlemen, there was a mr. Gray Garland Simmon, five other men, and a negro woman. The three French gentlemen and mr. Pierce, who alone occupied one boat, were attacked on the 26th ult: from circumstances we are authorized to conclude, that the other boats were taken on the 21st: they passed Limestone on the 19th. The savages had in their possession

in which eight or ten of them chace to the French gentlemen, finding they could not escape, mined to present a white handkerchief, with other demonstrations of friendship, and surrender without violence: for this purpose, Mr. Rat took post at the stern of the boat, and, when the savages had approached very near, he offered his sword; and, in return, received the Indian's tomahawk; at the same time, the botanist was shot dead, the mineralist badly wounded; the boat at this time having drifted to the shore, Mr. Pierce, and the young French gentleman, jumped on board, and the current being rather strong, the savages passed them, whilst they were butchering and plundering Mr. Ragaut, and the other victims. They with difficulty gained the shore; and, under cover of the woods, made a circuit, and fell in the river, below the savages, where they were, the next day, taken up by a boat, and conveyed to the city the day after. These are all the circumstances we have been able to collect on this melancholy occasion.

There remains no doubt, that the two boats first mentioned, have been captured, as one of them has been taken up at the rapids, and the other was seen in possession of the savages; but the fate of the captives is uncertain—Two boats a few hours in front of Mr. Ragaut, under the direction of Captain Balliard Smith and Mr. Hinds, were attacked at the same place, from the shore, but they returned the fire, and escaped without further injury, than two men wounded: and it is said two men were killed in the attack.

Philadelphia, April 30.

The planters of South-Carolina are making experiments in the cultivation of cotton, and they have proved it to be very satisfactory, promising great profit. We hope to see their

cotton bags, before long, the wool-packs of America. We learn that they have got the gin, or machine for cleaning it, by which the profit of raising it must be much increased. How flourishing would South-Carolina and Georgia soon be, with proper economy, and under a good government, who, to their old valuable produce, rice and indigo, have lately added tobacco and cotton? The latter articles may be of considerable consequence to the coasting trade, which will probably be confined, by the general government, to American bottoms, as such a regulation would not at all interfere with the necessary open market to foreigners. The large towns, in the middle and northern states, will probably become the scenes of considerable cotton manufactures, and to them the raw cotton must be transported from the places of its growth. This domestic branch of the carrying trade, from port to port within the union, is becoming daily more important. The Virginia collieries now employ a good deal of tonnage, and new discoveries, on the Hudson, Delaware, or Chesapeake, will, it may be hoped, increase the benefits of this branch.

Extract of a letter from Baltimore, dated April 28.

"Our convention have adopted the new constitution by a great majority—63 to 11—To-morrow it is to be ratified in form."

We are informed, that American vessels are received with great cordiality at Cayenne, and that the French government shew them every attention. Flour, and all kinds of provisions from the United States, find there a good market, the commerce of that colony being entirely free. Its population, which in the late war amounted to ten thousand souls, including negroes, is fast increasing. The plantations of sugar, coffee, indigo, pepper, cotton, cloves, &c. are in a thriving condition.

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T H E

AMERICAN MUSEUM,

O R

R E P O S I T O R Y

OF ANCIENT AND MODERN

FUGITIVE PIECES, &c.

PROSE AND POETICAL.

For M A Y, 1788.



..... " *With sweetest flow'rs enrich'd,*
" *From various gardens cull'd with care.*"

* * * * *

..... " *Collecta revirescunt.*"



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M.DCC.LXXXVIII,



T H E

AMERICAN MUSEUM,

For M A Y, 1788.



Thoughts on crimes and punishments.

IN this season of political investigation, when the united attention of America, is attracted by the grand system of national government, that to give consequence and dignity to it, among the first empires of the earth; the following observations will, perhaps, be thought of little moment. Yet as the mind cannot always be engaged in the contemplation of things in their utility so extensive—and as objects of inferior consideration, may yet be well worthy of public attention—the author, on that ground, begs leave to submit the ensuing remarks, to the perusal of his countrymen. He does not expect that much good can result from a publication composed with talents inadequate to the task; but hopes it may suggest the undertaking to some abler writer, to employ his pen on a subject so generally neglected, notwithstanding, in its nature, it is so laudable.

Before men were subject to laws of any kind, as in the early ages of the world, they were in a state of unlimited freedom, and, consequently, every person had a right to do whatever seemed to him to be best, without any other power to control

his actions, than barely his own will and pleasure. Whilst mankind were yet but few in number, and the world but thinly peopled, this unbounded enjoyment of liberty was not discovered to be an evil. The regions of the earth were ample and extensive, so that there was room for each man to move in a sphere of his own. But when the inhabitants of the world became numerous, the full enjoyment of liberty was found to be an inconvenience, inasmuch as it was plainly discovered to be incompatible with that harmony between each other, without which, there could be no such thing as happiness in the world.

For men's actions, by reason of their propinquity, interfering with one another, the disorderly and the wicked were always interrupting the tranquility of the sober and the virtuous, and throwing all around them into commotion. There was no law to punish such licentious behaviour, and accordingly, the world experienced many dreadful irregularities.—Observation and experience having, at length, fully evinced the mischief of living in a state of natural liberty; and a general conviction prevailing, that it was expedient, and proper, to surrender a part of those privileges derived from nature, for

the security and protection of the rest, the world came to the resolution of vesting power in the hands of a select body of men, in order to accomplish this salutary purpose.—This was the origin of civil society, and of civil government.

In entering into this compact, by which mankind agreed to submit to the restriction of laws, as, of two evils, the most eligible—they could only grant a power over those rights, that naturally belonged to them. Personal liberty, and property, being unquestionably in this class, it was at their option to yield them up to the disposal of another, without violating any law, moral or divine. They had therefore an undoubted authority to make any compact respecting those two privileges, and to submit the regulation of them, to lawgivers and legislators. But life being reserved by the Supreme Being, as a right, belonging to himself, mankind were not at liberty to commit the disposal of it into the hands of others, or to enter into any compact about it whatever. The only case wherein it was ever proper, or ever can be so, for the world to exercise jurisdiction of the lives of men, is pointed out by the Creator himself, in that passage of scripture where he says, “blood shall be repaid by blood.” But this jurisdiction being the consequence of a divine law, could not be exercised without a manifest violation of the divine prerogative, did the law proceed from another power than that of omnipotence.—Nothing is more conspicuous than the wisdom of the Creator, in reserving to himself, the life of man; since none so well understands its value, and none who are unable to give it, should be allowed to take it away.

Previous to entering into the main purpose of this publication, it was necessary to premise the foregoing observations—in order to comprehend

how far the power of making law originally extends, and to separate and distinguish those objects to which it is applicable, from those to which it is not. We shall by this mean discover, whether men have not, in exercising this power, exceeded, on some occasions, the bounds allotted them by providence; and whether they have not, in cases of capital consideration, violated the rights of heaven, and of humanity.

The most superficial observation will convince us, that this fatal and unwarrantable stretch of power, has been, and is now, exercised under many governments. Men have assumed a right over the lives of the fellow creatures, collectively, although, individually, they have not even so much as a right over their own lives! Legislators have enacted laws which punish, with death, a crime that would be severely expiated, by what is not deemed by many, a very rigorous corporal punishment. And in the countries where those laws have been made, instead of testifying the abhorrence of such unwarrantable proceedings, have not failed to execute them, with unrelenting severity.

Yet one would imagine, that none could, without a mixture of horror, compassion, and resentment, see a fellow creature about to be plunged into the abyss of eternity, by a cruel and ignominious death, for having appropriated to his own use, a small pittance of another's property!—the probability of being driven into the commission of this crime, by a distress so excessive as to call for immediate relief, is not only a mitigation of the offence but the strongest aggravation of the inhumanity of that law, which punishes a trespass, so slight, with such rigorous extremity. Add to this consideration, the reflection, that the property taken, might possibly have been of little use to the proprietor and our abhorrence of the savage sa-

justice, is complete. When we compare the crime committed, with the punishment to be inflicted, and see the vast disparity between them; when we see that the former bears no proportion to the latter, and behold the unfortunate person's excessive misery, all sense of his guilt is swallowed up by our compassion, and we feel ourselves irresistibly drawn to explore his fate, and to reprobate the cruelty of that sentence, the effects of which, to a fellow creature, are, in all irreparable injustice and calamity.

But, however shocking, even the idea of such a sacrifice must be to every person of humanity; yet, on every very occasion, the practice of mankind, in some countries, evinces them to be capable of great savagery and barbarity. In Great-Britain, where those sanguinary laws, at this day, triumphant reign, shoals, from their prisons, are led publicly to the slaughter—and yet no alteration in them is attempted. Even our own country, on which the goodness of providence, hath bestowed so many blessings, is not, in this respect, less culpable.—Let America repeal those odious laws, and become the advocate of humanity, as she hath long been the admired one, of the rights of human kind.

Let any man who sees a malefactor led to execution, for one of those comparatively slight transgressions, lay his hand upon his heart, and ask himself whether he never did any thing more destructive to the happiness of the world? let him, thus solemnly, ask himself, whether he never attempted to injure the domestic tranquility of his neighbour—to obtain the possession of his property by methods, dishonest and unjust—or, privately to destroy his reputation and credit in the world, by means, equally malicious and detestable? these being

crimes of an infinitely deeper dye, than that of having deprived another of the value of a shilling*, and in their consequence, much more deadly and pernicious; let him acknowledge, that he himself better deserves death, than the malefactor before his eyes, and shudder at the excessive severity of the law. Let him acknowledge, that the person condemned to death, suffers more by the cruel and capricious disposition of mankind, in making laws to punish capitally, one species of offences, while others, of a higher degree of enormity, are overlooked, than by any uniform rule of justice whatever.

If in a moral light, those laws are so justly reprehensible—in a political one, they are still more so. The least reflection will discover their absurd and evil tendency, and shew them to be pregnant with dreadful mischief in their operation.—A robber, impressed with every sentiment in behalf of the person whom he has plundered, is yet tempted, when his own life comes in competition with them, to over-rule the dictates of his humanity. He does not hesitate, therefore, to remove out of the way, the only witness that can endanger it. In this instance, he is in a great degree excusable, by the reflection, that through the resentment of him he had deprived of a trifle, his own life might have been unjustly taken away, if he had not resorted to this desperate expedient, to prevent it.—Thus, murder is added to robbery; because the punishment of those two crimes, being equal, and the greatest that can possibly be inflicted, no new danger is incurred,

NOTE.

* In England the laws condemn a man to death for robbing another of a shilling sterling.

by adding the latter to the former, but the transgressor, on the contrary, accomplishes his own safety by it.—On this occasion, he only pursues a very natural principle, self preservation.—Crimes, whose degrees of enormity are very different, being thus, by the law, confounded—and the commission of the most flagitious, being made necessary to the safety of him who has already committed that which is naturally the most pardonable—it is no wonder that the perpetration of the one, should so often be immediately succeeded by the perpetration of the other.—If, however, it is found, that in some instances, the one does not succeed the other, it is not owing to the fear of the law, but to the force of remaining virtue. The law tempts the offender to secure his own safety, by the death of the person he has rifled; but he rejects the infamous overture, in favour of the rights of humanity, and of conscience.—Thus the law seduces, where it was intended to amend; stimulates to the commission of offences a thousand times worse than those it was made to prevent; renders the greatest crime in the world, familiar to the mind; and, by reducing it to a level with theft, or simple robbery, destroys the sense of the distinction nature has made between them, and lessens that abhorrence it has implanted in the mind of men, for the blackest, and most capital, of all transgressions.—Had different and proper degrees of punishment been allotted to the crimes we have mentioned, there would have been no temptation to avoid the punishment of the one, by committing the other, since the criminal, conscious of the infinite disparity between them, and sensible that the same disparity of punishment likewise prevailed, would be awed by the fear of incurring fresh danger, and therefore deterred from incurring fresh guilt.

But the evils already pointed out are not the whole which result from laws so impolitic and injudicious.—Their excessive severity, and disproportionate punishment, strike the rod of justice from the hand of the party injured, who, though willing to inflict a penalty adequate to the injustice he has sustained, yet shudders at the idea of taking the transgressor's life. He chooses, therefore, to connive at his escape, rather than by delivering him up to the law, expose him to a punishment that holds no measure with the offence.—Encouraged by successful villainy, the offender prosecutes the same course of life, with redoubled audacity; again, transgresses, and, for the reason before mentioned, again experiences the like indulgence. Emboldened, now, by repeated success, he lays aside all fear of punishment, adds crime to crime, and enormity to enormity. Thus accustomed to reiterated transgressions, he grows callous to the admonitions of conscience, loses all sense of shame, and becomes capable of every gradation of guilt. Nothing, now, stops his hand; he tramples on all laws, human and divine;—violence and outrage mark his steps;—and he degenerates into a lawless savage, to be hunted down by mankind.—The patience of the world being at length exhausted, it unites against him—he is arrested, and put off in the full bloom of iniquity. Thus he was suffered to deserve death, because if he had been sooner apprehended, he would have suffered death before he deserved it.

There is no greater argument against such violent laws, than the lenity shewn to offenders; and the legislatures of those countries where they are in force, seem to acknowledge the impropriety of them, when they lodge a power in their executive to grant reprieves and pardons. Doe

not this betray an opinion that they are too harsh, since they require a mitigation? And if it is their opinion, why do they not avow it, and correct the errors of their administration?—Nothing could be more noble than this candid and open recantation of their political oversights; and nothing on the contrary, can be more despicable and unjust, than their perseverance in an error, which common sense, experience, and their own judgment, unite to condemn.—But to return to the point in view.

A milder and more equitable use of power would probably have produced much happier consequences. In this case, there is the strongest reason for supposing, that the laws could have been pointedly executed. The punishment would have trod close on the heels of the offence, because the whole world would have united to discourage transgressions noxious to public happiness. The fear of exposing the transgressor's vice, being removed—and the certainty that the punishment of any crime, could not have exceeded the limits of justice—nothing would have remained to check that desire, which every one feels, to see a violation of the laws punished; and the thief, in every instance, would, accordingly, have been delivered up to their chastisement. It being thus reduced to certainty, that penalties would be inflicted, whenever a breach of the laws took place, a general reformation among the disorderly and licentious members of society, would have been produced. The law, in that case, would have been calculated to prevent, instead of to multiply crimes; and, armed with real terrors, it would have been formidable to all offenders; and none would have ventured to approach the sphere of its influence, without caution. Thousands of valuable lives, would, by these means, have been saved, that

have been cut off by the weak and oppressive laws of arbitrary power. Transgressors, overtaken suddenly by punishment, in their first off-set, would have had no time to extinguish shame by a familiarity with guilt. The bud of iniquity, being suddenly nicked, the fruit, of course, would have been destroyed. Innumerable multitudes, by this means, would have recovered from the first false step, and have turned it to the advantage of their future lives.

The fear of shame operates more forcibly on some minds, than the fear of death. Punishments, therefore, which tend to stigmatize and render infamous, would be much more apt to prevent the commission of flagitious enormities, than the heaviest denunciations of the keenest rage, united with power, the most unlimited. But notwithstanding this consideration—DEATH must still be considered, as the greatest of all terrestrial calamities. It is that which separates the soul from the body, precipitates it into the immeasurable ocean of eternity, and delivers it up into the hands of its Maker. It irrevocably seals our doom, produces a final decision on our fate, and precludes, for ever, the possibility of an appeal! Considered in this awful light, the terrors of it should not be sported with, and rendered, in practice, familiar to the mind of man. Being the greatest of all possible evils, it should be reserved as a punishment for the greatest of all possible crimes—of crimes equally tremendous, and equally irremediable!

Having, at length, shewn, that all laws which punish capitally, other offences than death, are founded on a manifest usurpation of the divine prerogative—that they are inconsistent with justice, morality, and sound policy—and that laws, of a milder tendency, would have answered better the purposes of civil government—it

is time to put a final period to these remarks.

A. L. F. R. E. D.
Baltimore, March 25, 1788.

Mr. PRINTER,

I take the liberty of enclosing you a copy of lord Mahon's method of securing houses from fire: and the interest your humanity will take in it, makes it, I am sure, unnecessary to request you to give it a place.—As this city is on the increase, it will be no doubt attended with greater good effects than even in London, where it was particularly intended to be applied by the illustrious philosopher who invented it; for it is only at the first erecting of a building, that the greater part of the enclosed observations can be carried into execution.

A CONSTANT READER.

Description of a most effectual method of securing buildings against fire, invented by Charles lord viscount Mahon, F. R. S.

SECT. 1. **T**HE new and very simple method which I have discovered of securing every kind of building (even though constructed of timber) against all danger of fire, may properly be divided into three parts; viz. under-flooring, extra-lathing, and inter-securing, which particular methods may be applied in part, or in whole, to different buildings, according to the various circumstances attending their construction, and according to the degree of accumulated fire, to which each of these buildings may be exposed, from the different uses to which they are meant to be appropriated.

Sect. 2.—The method of under-flooring may be divided into two

parts, viz. single and double under-flooring.

The method of single under-flooring is as follows:—a common strong lath, of about one quarter of an inch thick, should be nailed against each side of every joist, and of every main timber which supports the floor intended to be secure. Other similar laths ought then to be nailed the whole length of the joist with their ends butting against each other; these are what I call fillets. The top of each fillet ought to be one inch and a half below the top of the joists or timbers against which they are nailed. These fillets then form, as it were, a sort of ledge on each side of all the joists.

Sect. 3.—When the fillets are going to be nailed on, some of the rough plaister hereafter mentioned (sect. 4.) must be spread with a trowel along that side of each of the fillets which is to lie next to the joists, in order that these fillets may be well bedded therein when they are nailed on, so that there should not be any interval between the fillets and the joists.

Sect. 4.—A great number of common laths (either of oak or pine) must be cut nearly to the length of the width of the intervals between the joists.

Some of the rough plaister reserved to above (sect. 3.) ought to be spread with a trowel, successively on the top of all the fillets, and along the sides of that part of the joist which is between the top of the fillet and the upper edge of the joist.

The short pieces of common lath just mentioned, ought (in order to fill up the intervals between the joists that support the floor) to be laid in the contrary direction to the joists, and close together in a row, so as to touch one another; as much as is wanted of straitness in the laths is to be possibly allowed, without the laths lapping over each other; their ends

must rest upon the fillets (spoken of above, (sect. 2.) and they ought to be well bedded in the rough plaster. It is not proper to use any nails to fasten down either these short pieces of laths, or those short pieces hereafter mentioned, (sect. 7.)

Sect. 5.—These short pieces of laths ought then to be covered with one thick coat of the rough plaster spoken of hereafter, (sect. 9.) which should be spread all over them, and which should be brought with a trowel, to be about level with the tops of the joists, but not above them. This rough plaster in a day or two should be trowelled all over, close home to the sides of the joists, but the tops of the joists ought not to be any wise covered with it.

Sect. 6.—The method of double under flooring is, in the first part of it, exactly the same as the method just described. The fillets and the short pieces of laths are applied in the same manner: but the coat of rough plaster ought to be little more than half as thick as the coat of rough plaster applied in the method of single under flooring.

Sect. 7.—In the method of double under flooring, as fast as this coat of rough plaster is laid on, some more of the short pieces of laths, cut as above directed, (sect. 4.) must be laid in the intervals between the joists, upon the first coat of rough plaster: and each of these short laths must be, one after the other, bedded deep and quite sound into this rough plaster whilst it is soft. These short pieces of laths should be laid also as close as possible to each other, and in the same direction as the first layer of short laths.

Sect. 8.—A coat of the same kind of rough plaster should then be spread over the second layer of short laths, as there was upon the first layer above described. This coat of rough plaster should (as above directed, sect. 5. for the method of single un-

der flooring) be trowelled level with the tops of the joists, but it ought not to rise above them. The sooner this second coat of rough plaster is spread upon the second layer of short laths just mentioned, (sect. 7.) the better.

What follows, as far as sect. 13, is common to the method of single as well as to that of double under flooring.

Sect. 9.—Common coarse lime and hair (such as generally serve for the pricking up coat in plastering) may be used for all the purposes before and hereafter mentioned: but it is considerably cheaper, and even much better, in all those cases, to make use of hay instead of hair, in order to prevent the plaster work from cracking. The hay ought to be chopped to about three inches in length, but no shorter.

One measure of common rough sand, two measures of slaked lime, and three measures (but not less) of chopped hay, will prove, in general, a very good proportion, when sufficiently beat up together in the manner of common mortar. The hay must be well dragged in this kind of rough plaster, and well intermixed with it; but the hay ought never to be put in till the two other ingredients are well beat up together with water.

This rough plaster ought never to be made thin for any of the work mentioned in this paper. The stiffer it is, the better, provided it be not too dry to be spread properly upon the laths.

If the flooring boards are required to be laid very soon, a fourth or a fifth part of quick* lime in powder,

NOTE.

* I have practised this method in an extensive work with great advantage. In three weeks, this rough plaster grows perfectly dry. The

very well mixed with this rough plaster, just before it is used, will cause it to dry very fast.

Sect. 10.—When the rough plaster work between the joists has got thoroughly dry, it ought to be observed, whether or not there be any small cracks in it, particularly next to the joists: if there be any, they ought to be washed over with a brush, wet with mortar-wash, which will effectually close them: but there will never be any cracks, if the chopped hay and the quick lime be properly made use of.

Sect. 11.—The mortar-wash I make use of, is merely this. About two measures of quick lime and one measure of common sand, should be put into a pail, and should be well stirred up with water, till the water grows very thick, so as to be almost of the consistency of a thin jelly. This wash, when used, will grow dry in a few minutes.

Sect. 12.—Before the flooring boards are laid, a small quantity of very dry common sand should be strewed on the rough plaster work, but not over the tops of the joists. The sand should be struck smooth with an hollow rule, which ought to be about the length of the distance from joist to joist, and about one eighth of an inch curvature; which rule, passing over the sand, in the same direction with the joists, will cause the sand to lie rather rounding

NOTE.

rough plaster, so made, may be applied at all times of the year in England with the greatest success. The easiest method, by much, of reducing the quick lime to powder, is, by dropping a small quantity of water on the lime stone, a little time before the powder is intended to be used. The lime will still retain a very sufficient degree of heat.

in the middle of the interval between each pair of joists.

The flooring boards may then be laid and fastened down in the usual manner: but very particular attention must be paid to the rough plaster-work and to the sand being most perfectly dry before the boards are laid, for fear of the dry rot; of which, however, there is no kind of danger, when this precaution is made use of.

Sect. 13.—The method of under-flooring I have also applied with the utmost success to a wooden stair-case. It is made to follow the shape of the steps; but no sand is laid upon the rough plaster-work in this case.

Sect. 14.—The method of extra-lathing may be applied to ceiling joists, to sloping roofs, and to wooden partitions. It is simply this:

As the laths are going to be nailed on, some of the above-mentioned rough plaster ought to be spread between these laths and the joists (or other timbers) against which these laths are to be nailed. The laths ought to be nailed very close to each other.

When either of the ends of any of the laths, lap over the ends of other laths, it ought to be attended to, that these ends be bedded sound in some of the same kind of rough plaster.

This attention is equally necessary for the second layer of laths hereafter mentioned, (sect. 15.)

Sect. 15.—This first layer of laths ought to be covered with a pretty thick coat of the same rough plaster spoken of above, (sect. 9.) A second layer of laths ought then to be nailed on each lath, being, as it is put on, well squeezed and bedded sound into the soft rough plaster. For this reason, no more of this first coat of rough plaster ought to be laid on at a time, than what can be immediately followed with the second layer of lat.

The laths of this second layer ought to be laid as close to each other as they can be, to allow of a proper clench for the rough plates.

The laths of the second† layer may then be plastered over with a coat of the same kind of rough plaster, or it may be plastered over in the usual manner.

SECT. 16.—The third method, which is that of inter-securing, is very similar, in most respects, to that of under-flooring; but no sand is afterwards to be laid upon it. Inter-securing is applicable to the same parts of a building as the method of extra-lathing just described; but it is not often necessary to be made use of.

SECT. 17.—I have made a prodigious number of experiments upon every part of these different methods. I caused a wooden building to be constructed at Chevening in Kent, in order to perform them in the most natural manner. The methods of extra-lathing and double under flooring, were the only ones made use of in that building.

On the 26th of September, 1777, I had the honour to repeat some of my experiments before the president and some of the fellows of the royal society, the lord mayor and aldermen of the city of London, the committee of city lands, several of the foreign ministers, and a great number of other persons.

SECT. 18.—The first experiment was to fill the lower room of the building (which room was about 26 feet by 16) full of shavings and faggots, mixed

NOTE.

† If a third layer of laths be immediately nailed on and be covered with a third coat of rough plaster, I then call the method treble lathing: but this method of treble lathing can almost, in no case, be required.

with combustibles, and to set them on fire. The heat was so intense, that the glass of the windows was melted like so much common sealing wax, and ran down in drops: yet the flooring boards of that very room were not burnt through, nor was one of the side timbers, floor joists, or ceiling joists, damaged in the smallest degree: and the persons who went into the room immediately over the room filled with fire, did not perceive any ill effects from it whatever; even the floor of that room being perfectly cool during that enormous conflagration immediately underneath.

SECT. 19.—I then caused a kind of wooden building (of full 50 feet in length, and of three stories high in the middle) to be erected quite close to one end of the secured wooden house. I filled and covered this building with above eleven hundred large kiln faggots, and several loads of dry shavings; and I set this pile on fire.

The height of the flame was no less than eighty-seven feet perpendicular from the ground; and the grass upon a bank, at a hundred and fifty feet from the fire, was all scorched; yet the secured wooden building, quite contiguous to this vast heap of fire, was not at all damaged, except some parts of the outer coat of plaster work.

This experiment was intended to represent a wooden town on fire, and to show how effectually even a wooden building, if secured according to my new method, would stop the progress of the flames on that side, without any assistance from fire engines.

SECT. 20.—The last experiment I made that day was the attempting to burn a wooden stair-case secured according to my simple method of under flooring. The under side of the stair-case was extra-lathed. Seve-

ral very large kiln faggots were laid and kindled under the stair-case, round the stairs, and upon the steps; this wooden stair-case, notwithstanding, resisted, as if it had been fire-stone, all the attempts that were made to consume it.

I have since made five still stronger fires upon this same stair-case without having repaired it; having moreover filled the small place in which the stair-case is, entirely with shavings and large faggots, but the stair-case is still, however, standing, and is but little damaged.

SECT. 21.—In most houses, it is necessary only to secure the floors; and that according to the method of single under-flooring, described in § 2, 3, 4 and 5. The extra expense of it in London (all materials included) is only about ninepence per square yard, unless there should be particular difficulties attending the execution; in which case it will vary a little.—When quick lime is made use of, it is a trifle more.

The extra expense of the method of extra lathing is, in London also, no more than sixpence per square yard for the timber, side walls, and partitions; but for the ceiling, about ninepence per square yard. No extra-lathing is necessary in the generality of houses.

SECT. 22.—I propose giving to the world, before it is very long, a detailed account of many other experiments I have made upon this subject, and of the various advantages arising from my method, with several particulars relative to different parts of each of the methods above described, and relative to their joint or separate application to different kinds of buildings, and to the different constituent parts of a house; to which I shall add a full explanation of the principles upon which they are founded, and the reasons for their certain and surprising success.

Mr. Printer, *1841*
WHILE we rejoice in the step which has been taken by the late federal convention, to provide for the entire stoppage of the commerce of the negroes in twenty one years, we must wish that the individual states, which have not as yet passed laws for the abolition of this inhuman traffic, may, previous to that time be induced to a measure which will redound so much to their honour, and, at the same time, as has been demonstrated by several publications, particularly that of dean Nickolls*, to their interest.—to this end, and to disseminate as far as possible the laudable endeavours of individuals, and of societies, who have exerted themselves in defence of humanity, and the rights of mankind, I wish you to insert the following memorial, drawn up by the society for the gradual abolition of slavery in Philadelphia, which was intended to be presented to the late federal convention, but was withheld upon an assurance being given by a member of the convention, that the great object of the memorial would be taken under consideration, and that the memorial, in the beginning of the deliberations of the convention, might alarm some of the southern states, and thereby defeat the wishes of the enemies to the African trade. HUMANITAS.

To the honourable the convention of the united states of America, now assembled in the city of Philadelphia. The memorial of the Pennsylvania Society for promoting the abolition of slavery, and the relief of free negroes, unlawfully held in bondage.

THE Pennsylvania Society for promoting the abolition of sla-

NOTE: See next page.

y, and the relief of free negroes, lawfully held in bondage, rejoice in their fellow-citizens in beholding a convention of the states assembled for the purpose of amending the general constitution.

They recollect with pleasure, that on the first acts of the illustrious Congress of the year 1774, was a resolution for prohibiting the importation of African slaves.

It is with deep distress they are led to observe, that the peace was scarcely concluded, before the African trade was revived, and American vessels employed in transporting the inhabitants of Africa, to cultivate, as it were, the soil of America, before it had drunk in all the blood which had been shed in her struggle for liberty.

To the revival of this trade, the society ascribe part of the obloquy which foreign nations have heaped on our infant states. In vain let us be, the pretensions of the united States to a love of liberty, or a regard to national character, while they share the profits of a commerce that can only be conducted upon rivers of human tears and blood.

By all the attributes, therefore, of Deity, which are offended by this human traffic—by the union of our whole species in a common ancestor and by all the obligations which result from it—by the apprehensions and terror of the righteous vengeance of God in national judgments—by the certainty of the great and awful day of retribution—by the efficacy of the prayers of good men, which would instantly insult the majesty of heaven, if they were not answered in behalf of our country, while the iniquity we deplore continues among us—by the sanction of the Christian name—by the assurances of domestic connexions, and the pangs which attend their dissolution—by the captivity and sufferings of our fellow-citizens in America, which seem to be intended by

Divine Providence, to awaken us to a sense of the injustice and cruelty of dooming our African brethren to perpetual slavery and misery—let us regard to the consistency of principles and conduct which should mark the citizens of republics—by the magnitude and intensity of our desires, to promote the happiness of those millions of intelligent beings, who will probably cover this immense continent with rational life—and by every other consideration that religion, policy, and humanity can suggest—the society implore the present convention to make the suppression of the African trade in the united States a part of their important deliberations.

June, 1787.

Mr. Printer,

I ENCLOSE you a valuable letter on a most interesting subject—the slave trade—the iniquity of which, thanks to the benevolent principles of the quakers, has excited such a general spirit of abhorrence and opposition to that traffic, among the friends of humanity, in Great Britain, as must, eventually, annihilate a practice disgraceful to humanity. The information contained in this letter is as interesting to the inhabitant of South Carolina and Georgia as to the West India planter.

Your's,

P. D.

A letter to the treasurer of the society instituted for the purpose of effecting the abolition of the slave trade. From the rev. Robert Boucher Nickolls, dean of Middleham.

Middleham, Yorkshire, Oct. 19, 1787.

SIR,

I TAKE the liberty of troubling you, in consequence of an advertisement I have just seen in the York paper, by which I find several hu-

mane gentlemen, to their infinite honour, have notified their design to move in parliament for the abolition of the slave trade. Being myself a native of the West Indies, though established in this country, I feel myself interested in the cause you have nobly espoused; and wish to contribute my mite of information, to which your public invitation encourages me.

I conceive, sir, if it can be proved that the natural increase of the negroes already in the islands, would be fully adequate to the cultivation of them—and that such natural increase would be secured by humane treatment, no argument could then be brought against the abolition of this accursed traffic, but from the private interest of a few individuals, on this side of the Atlantic chiefly.

Though it must be from a number of facts that the above position can derive incontrovertible evidence, yet I will state one or two remarkable ones, referring you to persons in London to authenticate them in a better manner than I am able to do.

About seventeen or eighteen years ago, a Mr. Macmahon died upon his estate in the parish of St. George, in the island of Barbadoes. The estate was valued, as well as I can remember, at about 30,000*l.* that money. Its late possessor had been in possession of it seven or eight years: but finding it encumbered with a debt to a merchant in London, he resolved to pay off this encumbrance by extraordinary exertions; in consequence of which, he destroyed the health and lives of many of his negroes.* He

was therefore obliged to supply place with others, purchased time to time, during the space of ten years; till at length upon his own demise, his estate was lessened in the same state of encumbrance he found it, the more by the death of his slaves found equal to the original debt his estate.

Nearly about the same time little before, died Dr. Mapp, of the same island, a gentleman who possessed an estate of less value than that mentioned—being, as I believe, about the value of twenty thousand pounds currency, in a situation subject to drought, in a soil rich, and at a greater distance market. This gentleman was rather the patriarch than the tyrant among his negroes. Of proof they had a plentiful supply: his derness gave them a long respite labour during the greatest heat of day, from eleven to three: and per refreshments were added, in a sultry interval, without any labour of their own. Thus fostered by fatherly care, their increase was wonderful. Another estate, which there were no negroes, purchased, in order to receive overflow from the original estate which purchased estate was, I believe, of the value of twelve thousand pounds currency. The daughter of this gentleman had a suitable fortune; the son inherited a clear fortune above forty thousand pounds—more than double the original estate.

NOTE.

NOTE.

* Since writing the above, a gentleman of the island has assured me it was ascertained from a negro levy (or poll tax) that in two years the number of Macmahon's slaves was

lessened nearly one-half, i.e. 170 to 95, by his severity: and it was his usual boast, he did no fire a newly purchased slave to longer than four years, in which he could be sufficiently repaid for purchase.

ter is married to a most respectable gentleman, of good fortune, A. esquire, who will, I dare say, give you further on a subject that is so much honour to the memory of your lady's excellent father; for it is of importance to ascertain these particulars with minute exactness. I am the well known house of — can authenticate the former opinion, if it be, as I heard it in the end, at the funeral of that inhuman man Macmahon. Having now no connexion with the West-Indies, and being at a distance from town, my communications to you can be of little more service than pointing out quarter, from whence you may get better information: yet I have knowingly exaggerated any good, or misinformed you intention-

is very certain, that negroes multiply in warm climates in an infinitely greater proportion than in cold. Even extreme heat does not immode them: nor are they so liable, as the white people, to the disorders of warm climates, when their food is not impoverished by extreme scarcity, or unwholesome diet. In the West-India islands, and in the southern colonies of North-America, they will be full of health and vigour at those seasons, when the whites are affected with fevers and agues, and have swollen legs and red faces. But if the blacks are assailed with slow fevers and dysenteries, is there any wonder in it, when we consider that milk and fresh meat they never taste? Their food consists of maize, vegetables, and occasionally a little rancid salt fish, or (rarely) a small portion of salt beef or pork from Ireland, which is of the worst quality the market affords; and their drink is, commonly, water from the wells, occasionally with a little rum in it; and in the rainy seasons they

are not always withdrawn from their labours to shelter.

In the northern provinces of North-America, (where also I have resided), from the severity of the climate, the increase of the blacks is small, (indeed there are few of them): their natural complexion, of glossy black, is changed to a dark, unhealthy tawney; and they are soon old. But warm climates are congenial to them; in them, with tolerable treatment, they are prolific and long lived. It must, therefore, be the ill treatment they receive in the islands, that renders yearly supplies of new slaves necessary, to keep up the number on the plantations: where, when they arrive, many, from the loss of their liberty, their friends, and country, pine to death; some destroy themselves; few, if any, are capable of much labour, till the second or third year. And it is a known fact, that, when the planters find new recruits requisite for the cultivation of their estates, they not only prefer native slaves, but will give a considerably greater price for them.

Why then, it may be said, is any planter so blind to his own interest, as not to treat his slaves in a manner, that would amply repay his humane attention? Some persons do, and find their account in it. Still this practice is not general; far from it. The planter has passions, upon which there is no check in law, in favour of the negro, for whose murder, (if the property is vested in him) he is not accountable to the magistrate. The planter, from extravagancies in this country, from riotous living in his own, and not unfrequently from bad crops, is often deeply embarrassed with debts to the British merchant; or, eager to make a fortune, he trusts more to present exactions of labour, and parsimonious savings, than to the future product of humanity, or future recompense of liberal-

ty. I speak generally. I know there are amiable exceptions: but exceptions imply a rule to the contrary. And lastly, the planter, confirmed in habit, inflexible in obstinacy, and rooted in prejudice, is unwilling to try the effect of a lenient and novel system, from which, to say the truth, the vices of slaves (what can be expected from slaves?) render him often averse.

With respect to the force of prejudice in our islands, we know how invincibly unwilling the white people are to admit the slaves to the privileges of christianity, to which, I believe, the venerable society for propagating the gospel in foreign parts can give ample testimony. And why (upon the foot of humanity, I ask the question) are these poor people to be excluded from those comforts of our religion which its founder commanded to be tendered equally unto all? They are under no incapacity which they do not owe to us. At New-York, I have seen from twenty to forty black communicants. The people in our islands not only neglect, but object to the conversion of the slaves, upon pleas, which, if admitted originally, would have annihilated christianity at its first appearance.

In the continuation of lord Clarendon's history, we find, that in his time, the number of white inhabitants was fifty thousand—and of blacks, if I rightly recollect, a hundred thousand, in the island of Barbadoes: about twenty-five years since, the numbers, by actual enumeration, were, of whites less than twenty five thousand; of negroes ninety thousand. Now, though the number of whites has apparently diminished in a greater proportion than that of the blacks, yet it is to be observed, that the blacks are stationary; they do not migrate; the whites do: nor is the increase of the whites from new-

comers in a greater proportion than the number of natives that migrate or live elsewhere: besides that climate is more in favour of blacks than of the whites. It is in round numbers, a hundred years since lord Clarendon wrote his continuation. In this space of time, whites have diminished about half: the number of blacks has sensibly increased in the proportion of nineteen to ten, notwithstanding the yearly importation of five thousand, as I have heard: but stating it only at three thousand, or even three thousand, that would prove the original stock of blacks to have been lost just many times over, i. e. five, four, three, in the space of a century, besides the diminution from one hundred to ninety thousand: so while the whites, in a climate less favourable to them, have lost only half of their original stock, the blacks have lost it four or five times over. How near all these particulars approach to the precise fact, I have not the means of ascertaining; but in a general view, I believe they are sufficient to show that the blacks in our islands are diminished, through a treatment, in a proportion, which were it to prevail equally in all countries, in a century would depopulate the globe. But I think it would be worth while to examine accurately into these particulars; as an accurate calculation of the loss of humanity in our islands, would be an argument that no man, with the feelings of a man, could have the heart to reply to. I think, too, the amount of the annual import of slaves into our islands might be easily ascertained here at home, from the account of sales; that amount might be compared with the exports of produce from the islands; and the comparison would show how much of his produce the planter loses, and the proportionate charge upon it, which the c

mier pays, for a traffic that a little me and some humanity would render useless.

The immediate and effectual remedy for the diminution of slaves in the islands, would be the entire abolition of the slave trade. This would necessarily oblige the planter to take such care of his negroes, as would at once essentially serve the cause of humanity, without giving him any occasion for the plea, that his rights are infringed, or his property invaded; for surely, however he may have acquired a property of the slaves, now under his dominion, he can have none, in those who are not: he can have no greater right to recruit his gang with the inhabitants of Guinea than with the inhabitants of Britain. Nor can the British merchant be better entitled to buy or sell the inhabitants of Guinea, than the inhabitants of Guinea are to buy or sell him. Let him suppose himself at Algiers, and ask himself what he would think of his chains, or of the right that imposed them? What, if these were true, that the British merchant buys only captives taken in war? War is made in Guinea, that the captives may be sold to him. He is the receiver of stolen goods that makes the thief.

For all the blood spilt in such wars—for all the villages set in flames, by the contending parties—for all the ravages incident to war—for all the tears and sufferings of captives, whose attachments are violently broken—for all the cruelties they endure in the course of their voyage, under a rigid task-master, when sold for slaves, the merchant is to answer. He sets up self-interest as his god, and stabs humanity as the sacrifice to it. And shall the rest of the world sit down quietly, and suffer their common humanity to be thus injured and insulted—that the trader may eat turtle, and the daugh-

ter of the skipper of a vessel flounce in silks or muslins?

But it is a branch of national commerce, and is allowed by the legislature. So, anciently, among the states of Greece, was piracy not only allowed, but esteemed honourable. But in a matter so evidently contrary to every principle of common justice, where is the man, with shame in his face, or honesty in his heart, that, in a national assembly, will dare avow such a cause? If we admit the plea, from necessity, for such a traffic, where shall we stop? Is not the plea of the robber, who is hanged, as good? *Fiat justitia—ruat cælum.* The friends of liberty must, upon their own principles, reprobate this worst species of tyranny—the worst, because no other has so blighting an effect upon morals, no other so thoroughly vitiates the heart. The christian cannot countenance it. His bible shews, that “men-stealers” are classed with “murderers of fathers and mothers, and perjured persons,” 1 Tim. i. ver. 10. And will he mix in such a crew? Will he give them his countenance and support? They, who read and believe their bible, may learn from the histories and prophecies it contains, that though divine providence is pleased to permit one nation to oppress another—and though the oppressing power be the scourge of divine justice—yet vengeance will revert to the oppressor at last, because he seeks the injury, not the reformation of the oppressed: and, therefore, believers in a divine providence will see much to dread in the encouragement of the slave-trade.

Could that infernal traffic be annihilated, the condition of slavery in the islands would be meliorated; the native negroes would be more tractable, more ready to acquire the regard of those among whom they were born, and more easily converted to

christianity, because they may be more easily informed. At length, by the mild and uniform operation of christian principles, slavery itself might be abolished. For though christianity, at its first promulgation, for obvious reasons, did not affect to introduce any alteration in the civil rights of men, yet its genuine tendency is friendly to civil liberty, as Montesquieu has observed in its favour, and Gibbon has dared to allege to its reproach. That slavery is not at all necessary to the cultivation of the sugar-cane, is evident: for Sicily, within a few centuries, manufactured sugar, as Cochin China now does, without any assistance from slaves. But were it otherwise, what would, what should, be the choice of Britons? to have sugar in their tea, or to set nations free from the scourge, the chain, and the yoke?

To the planter, the prohibition of the slave-trade would be immediately beneficial: and the benefit would be progressive with time: as it would immediately raise the value of his negroes, whose numbers also would be increased by a melioration of the system of slavery.

To the British merchant it would be equally beneficial, in a similar manner; for none of the produce of the islands being expended in the purchase of slaves, more would be left for the payment of debts to Britain.

To the British nation it would be beneficial, because the planter, cultivating the sugar-cane at less expence, could afford his produce at a lower rate; because also, seamen and soldiers would not be sent to perish in the unhealthy climates of Africa.

To the American states it would afford a proof, that we are no less friendly to liberty than they, who have already shewn to us an example in this respect, which we ought first to have given.

To all the world it will prove o equity and humanity.

To nations yet unborn, it will transmit liberty and happiness.

To the reign of George the third it will give peculiar lustre, and exhibit him as the friend of mankind at large, whom the noblest zeal is the support of piety and morals at home, distinguishes as the real father of his people.

I have not, sir, intentionally misstated any circumstance, and I am out of the way of more correct information. What I have written is dictated by an ardent wish for the success of your cause.

I have some pamphlets which have been published upon this subject, and will circulate them among my neighbours.

I am, sir, with great respect, your most obedient, humble servant,

ROBERT BOUCHER NICKOLLS
dean of Middleham.

—♦♦♦♦♦—

To the honourable the senate and house of representatives of the commonwealth of Massachusetts, in general court assembled, on the 27th February, 1788. The petition of a great number of blacks, freemen of said commonwealth,

Humbly sheweth,

THAT your petitioners are justly alarmed at the inhuman and cruel treatment that three of our brethren, free citizens of the town of Boston, lately received. A captain under pretence that his vessel was in distress on an island below in this harbour, having got them on board put them in irons, and carried them off from their wives and children, to be sold for slaves; this being the unhappy state of these poor men, what can your petitioners expect but to be treated in the same manner by the same sort of men? What then are our lives and liberties worth, if they

ay be taken away in such a cruel and unjust manner as this? May it ease your honours, we are not inflexible that the good laws of this state, forbid all such bad actions; notwithstanding, we can assure your honours, that many of our free blacks, that have entered on board vessels as amens, have been sold for slaves; and some of them we have heard from, that know not who carried them away. Hence it is, that many of those who are good seamen, are obliged to stay at home through fear, and the half of our time loiter about the streets, for want of employ; whereas they were protected in that lawful calling, they might get a handsome livelihood for themselves and theirs, which, in the situation they are now in, they cannot. One thing more we would beg leave to hint: that is, that your petitioners have, for some time past, beheld with grief, ships loaded out from this harbour for Africa, and there they either steal, or cause others to steal, our brothers and sisters, fill their ships' holds full of unhappy men and women crowded together, then set out to find the best market, to sell them there like sheep for the slaughter, and then return here like honest men, after having parted with the lives and liberty of their fellow-men; and at the same time call themselves christians. Blush, O heavens, at this! These our weighty grievances, we cheerfully submit to your honours, without dictating in the least, knowing by experience that your honours have, and we trust ever will, in your wisdom, do us that justice that our present condition requires, as God and the good laws of this commonwealth shall dictate to you. And as in duty bound, your petitioners shall ever pray.

PRINCE HALL.

Method of destroying caterpillars upon trees.

TAKE lighted charcoal in a chaffing dish: throw thereon some pinches of brimstone in powder, place the same under the branches that are loaded with caterpillars. The vapour of the sulphur, which is mortal to these insects, will not only destroy all that are on the tree, but prevent its being infested by them afterwards. A pound of sulphur will clear as many trees as grow on several acres,



Hint on the management of sheep.

IT has been often remarked, that the American sheep yield much less wool than the sheep of Britain, France, and Spain. This is owing to the length of our winters, and the quantity of snow on the ground, preventing their picking up as much nourishment as the sheep in Europe:—hence they drop their wool, from mere weakness, during the winter and spring. To prevent this, a farmer of long experience has found half a gill of Indian corn, given every day, to each sheep, to be extremely useful. It strengthens the sheep, by which means the quantity of wool is increased, as well as retained, till the time of shearing, to the great emolument of the farmer.

AGRICOLA.



On the use of mud as manure.

THROUGH my farm runs a little rivulet, or brook, in several parts of which are reservoirs or lodgments of mud. I have made it a rule, for some years, every summer I could find proper, as soon as my

hay was carried off my meadows, to clean those reservoirs, and spread the mud immediately on the ground. The success was surprising—I venture to say, almost to double my crops for two or three years after. I cannot get enough to dress my meadows all over, above once in three years: but, from what I have seen, that is often enough. I have known many good farmers mix the mud, when tolerably dry, with chalk-lime, dung, &c. and, after turning it together a winter, lay it on their land: and I allow this to be a good method: but these additions are unnecessary upon meadows: I should not, indeed, think it prudent to throw it thus green on arable land. The way I have hitherto made use of it, is, carrying it on by small, low carts, drawn by a single horse, and spreading it out of the cart with a scoop: and of this work we can do a great deal in a day.



A hint to the farmers.

THE hon. mr. Dalton, of the state of Massachusetts, in a letter to the Boston academy of arts, informs them, that from one third of an acre of a sandy loam, well manured, he raised two hundred and fifty bushels of carrots, which weighed upon an average sixty-six pounds per bushel. Of the usefulness of this nutritious vegetable, we have the following account, published in the Encyclopædia Britannica, under the article agriculture, no. 130.

“ At Parlington, in Yorkshire, from the end of September till the first of May, twenty working horses, four bullocks, and six milch cows, were fed upon the carrots that grew on three acres, and these animals never tasted any other food, but a little hay. The milk was excellent—

and, over and above, thirty ho
were fattened upon what was left
the other beasts."

A FARMER.



Address to the citizens of the united States.

THE peace, liberty, and safety of our common country call upon us, at this time, for all good sense, our moderation, and our integrity. Unhappy symptoms of unseasonable warmth have too frequently discovered themselves in the publications and debates upon this momentous subject whereon depend all our future good or evil. The proposed constitution for the united states, being an object of immense consequence, not only to us, but to mankind, we must deeply regret and be shocked by the language in which the subject is treated. When a number of characters, than whom on the whole, the union has no better nor abler friends—when, I say, a number of characters such as the under the authority of their respective states, had formed a constitution, which was promulgated in the most open manner, in thousands of public newspapers and hand-bills reported to the legislatures, and transmitted to congress—when congress had passed it again to the legislatures—and the legislatures had called conventions in most instances unanimously—when two of the conventions have adopted it unanimously, and another by a majority of two-thirds—what shall we say of ourselves, or what must the astonished world think of us, when they find such open conduct indecently and outrageously termed a conspiracy—and the whole list of men, who have taken a part in the business, preposterously attempted to be held up

e characters of dark conspirators? e men who gratefully remember st services—ye men of just and oderate, but firm spirits, as ye value e peace and honour of our coun- y, take heed how ye join such lse, outrageous, and seditious ac- sers! How familiarly do they lk of the blood of whole conven- ons of the people! The lives of the deralists, say the members of the olitical club of Cumberland, will arcely atone for their conduct! range excess, of a small body of en, the first, throughout the union, ho have come to a resolution unfav- ourable to the new constitution! is a language and conduct, unwar- antable in any cause: and however ey may hope it will inflame the nformed part of the people, it ust have a very opposite effect on e minds of those respectable men, ho are to compose the state conven- ons. All the legislatures who have et met, and every state convention at has taken up the constitution, ave subjected themselves, in com- on with the federal convention, to e intemperate censures and daring enaces of these writers and resolv- rs, manfully despising their wild harge of conspiracy, or their wilder nd more wicked threats of blood- ed. For shame, for shame, my ountrymen! do not thus throw new nd deeper disgrace upon your ready-wounded national character. Do, not thus exert every nerve to precipitate this devoted country gain into civil broils, bleeding as he yet is, from her late conflict.

A free-born American.

Philadelphia, January, 1788.

*Address to the freemen of South Caro-
lina, on the federal constitution. Said
to have been written by Dr. Ramsay.*

Friends, countrymen, and fellow citizens,

YOU have, at this time, a new federal constitution proposed for your consideration. The great importance of the subject demands your most serious attention. To assist you in forming a right judgment on this matter, it will be proper to consider,

First, It is the manifest interest of these states to be united. Internal wars among ourselves, would most probably be the consequence of disunion. Our local weakness particularly proves it to be for the advantage of South Carolina to strengthen the federal government: for we are inadequate to secure ourselves from more powerful neighbours.

Secondly: If the thirteen states are to be united in reality, as well as in name, the obvious principle of the union will be, that the congress, or general government, should have power to regulate all general concerns. In a state of nature, each man is free, and may do what he pleases: but in society, every individual must sacrifice a part of his natural rights: the minority must yield to the majority: and the collective interest must controul particular interests. When thirteen persons constitute a family, each should forego every thing that is injurious to the other twelve. When several families constitute a parish, or county, each may adopt what regulations it pleases, with regard to its domestic affairs; but must be abridged of that liberty in other cases, where the good of the whole is concerned.

When several parishes, counties, or districts, form a state, the separate interests of each must yield to the collective interest of the whole.

When several states combine in one government, the same principles must be observed. These relinquishments of natural rights, are not real sacrifices: each person, county, or state, gains more than it loses: for it only gives up a right of injuring others, and obtains, in return, aid and strength to secure itself in the peaceable enjoyment of all remaining rights. If then we are to be an united people, and the obvious ground of union must be, that all continental concerns should be managed by congress—let us by those principles examine the new constitution.

Look over the eighth section, which enumerates the powers of congress; and point out one that is not essential, on the before-recited principles of union. The first is a power to lay and collect taxes, duties, imposts, and excises, to pay the debts, and provide for the common defence and general welfare of the united states.

When you authorized congress to borrow money, and to contract debts, for carrying on the late war, you could not intend to abridge them of the means of paying their engagements, made on your account. You may observe, that their future power is confined “to provide for the common defence and general welfare of the united states.” If they apply money to any other purposes, they exceed their powers. The people of the united states, who pay, are to be judges how far their money is properly applied. It would be tedious to go over all the powers of congress: but it would be easy to shew, that they all may be referred to this single principle, “that the general concerns of the union ought to be managed by the general government.” The opposers of the constitution cannot shew a single power, delegated to congress, that could be spared, consistently

with the welfare of the whole; not a single one, taken from the state but such as can be more advantageously lodged in the general government, than in that of the separate states.

For instance: the states cannot emit money. This is not intended to prevent the emission of paper money, but only of state paper money. Is not this an advantage? There are thirteen paper currencies, thirteen states, is embarrassing commerce, and eminently so to travellers. It is, therefore, obvious in our interest, either to have no paper or such as will circulate from Georgia to New Hampshire.

Take another instance: the congress are authorized to provide and maintain a navy. Our sea-coast, its whole extent, needs the protection thereof: but if this was to be done by the states, those, who build ships, would be more secure, than those who do not. Again: if the local legislatures might build ships of war at pleasure, the eastern would have a manifest superiority over the southern states. Observe, how much better this business is referred to the regulation of congress. A common navy, paid out of the common treasury, and to be disposed of by the united voice of a majority, for the common defence of the weaker, as well as of the stronger states, is promised, and will result from the federal constitution. Suffer not yourselves to be imposed on by declamation. Ask the man, who objects to the powers of congress, two questions: is it not necessary that this supposed dangerous power should be lodged somewhere? And, secondly, where can it be lodged, consistently with the general good, so well as in the general government? Decide for yourselves on these obvious principles of union.

It has been objected, that the east

states have an advantage in their representation in congress. Let us examine this objection—the four eastern states send seventeen members to the house of representatives: but Georgia, South Carolina, North Carolina and Virginia, send twenty-five. The six northern states send twenty-seven, the six southern thirty. In both cases, we have a superiority;—but, say the objectors, add Pennsylvania to the northern states, and there is a majority against us. It is obvious to reply, add Pennsylvania to the southern states, and they are a majority. The objection amounts to no more, than, that seven is more than six. It must be known to many of you, that the southern states, from their vast extent of cultivated country, are daily receiving new settlers; but in New-England, their country is so small, and their land so poor, that their inhabitants are constantly emigrating. The rule of representation in congress is to vary with the number of inhabitants, our influence in the general government will be constantly increasing. In fifty years, it is probable that the southern states will have a great ascendancy over the eastern. It has been said that thirty-five men, not elected by yourselves, may make laws to bind you. This objection, if it has any force, tends to the destruction of your state government. By our constitution, six and nine make a quorum: of course, thirty-five members may make a law to bind all the people of South-Carolina.—Charleston, and any one of the neighbouring parishes, send, collectively, thirty-six members; it is, therefore, possible, in the absence of all others, that three of the lower parishes might legislate for the whole country. Would this be a valid objection against your own constitution? It certainly would not—neither is it against the proposed federal plan.

Learn from it this useful lesson—in- sist on the constant attendance of your members, both in the state assembly, and continental congress: your representation, in the latter, is as numerous, in a relative proportion with the other states, as it ought to be. You have a thirteenth part in both houses; and you are not, on principles of equality, entitled to more.

It has been objected, that the president, and two thirds of the senate, though not of your election, may make treaties binding on this state. Ask these objectors—do you wish to have any treaties? They will say yes. Ask, then, who can be more properly trusted with the power of making them, than they to whom the convention have referred it? Can the state legislatures? They would consult their local interests. Can the continental house of representatives? When sixty-five men can keep a secret, they may.—Observe the cautious guards which are placed round your interests. Neither the senate, nor president, can make treaties by their separate authority. They must both concur. This is more in your favour than the footing on which you now stand. The delegates in congress of nine states, without your consent, can now bind you; by the new constitution, there must be two thirds of the members present, and also the president, in whose election you have a vote. Two thirds are to the whole, nearly as nine to thirteen. If you are not wanting to yourselves, by neglecting to keep up the state's compliment of senators, your situation with regard to preventing the controul of your local interests by the northern states, will be better under the proposed constitution than it is now under the existing confederation.

It has been said, we will have a navigation act, and be restricted to

American bottoms; and that high freight will be the consequence. We certainly ought to have a navigation act: and we assuredly ought to give a preference, though not a monopoly, to our own shipping.

If this state is invaded by a maritime force, to whom can we apply for immediate aid?—To Virginia and North Carolina? Before they can march by land to our assistance, the country may be over-run. The eastern states, abounding in men and in ships, can sooner relieve us, than our next door neighbours. It is therefore not only our duty, but our interest, to encourage their shipping. They have sufficient resources on a few months notice, to furnish tonnage enough to carry off all your exports; and they can afford, and doubtless will undertake to be your carriers on as easy terms as you now pay for freight in foreign bottoms.

On this subject, let us consider what we have gained, and also what they have lost, by the revolution. We have gained a free trade with all the world, and consequently a higher price for our commodities. It may be said, and so have they. But those, who reply in this manner, ought to know, that there is an amazing difference in our favour. Their country affords no valuable exports: and, of course, the privilege of a free trade is to them of little value; while our staple commodity commands a higher price than was usual before the war. We have also gained an exemption from quit-rents, to which the eastern states were not subjected. Connecticut and Rhode Island were nearly as free, before the revolution, as since. They had no royal governors or councils to controul them, or to legislate for them. Massachusetts and New Hampshire were much nearer independence, in their late constitutions, than we were. The eastern states, by the revolution, have

been deprived of a market for the fish, of their carrying trade, the ship-building, and almost of everything but their liberties.

As the war has turned out so much in our favour, and so much against them, ought we to grudge them the carrying of our produce, especially when it is considered, that by encouraging their shipping, we increase the means of our own defence.

Let us examine, also, the federal constitution, by the principles of reciprocal concession. We have laid a foundation for a navigation act. This will be a general good; but particularly so to our northern brethren. On the other hand, they have agreed to change the federal rule, paying the continental debt, according to the value of land, as laid down in the confederation, for a principle of apportionment, to be founded on the numbers of inhabitants, in the several states respectively. This is an immense concession in our favour. Their land is poorer than our's; their numbers greater than our's; labour with them is done by white men, for whom they pay an equal share; while five of our negroes only count as equal to three of their whites. This will make a difference of many thousands of pounds in settling our continental accounts.

It is farther objected, that they have stipulated for a right to prohibit the importation of negroes after twenty-one years. On this subject, observe, as they are bound to protect us from domestic violence, they think they ought not to increase our exposure to that evil, by an unlimited importation of slaves. Though congress may forbid the importation of negroes after twenty-one years, it does not follow that they will. On the other hand, it is probable that they will not. The more rice we make, the more business will be for the

shipping: their interest will therefore coincide with our's. Besides, we have other sources of supply—the importations of the ensuing twenty years, added to the natural increase of those we already have, and the influx from our northern neighbours, who are desirous of getting rid of their slaves, will afford a sufficient number for cultivating all the lands in this state.

Let us suppose the union to be dissolved by the rejection of the new constitution; what would be our case? The united states owe several millions of dollars to France, Spain, and Holland. If an efficient government is not adopted, which will provide for the payment of our debt, especially of that which is due to foreigners—who will be the losers? Most certainly, the southern states. Our exports, as being the most valuable, would be the first objects of capture on the high seas: or descents would be made on our defenceless coasts, till the creditors of the united states had paid themselves, at the expense of this weaker part of the union.

Let us also compare the present confederation with the proposed constitution. The former can neither protect us at home, nor gain us respect abroad. It cannot secure the payment of our debts, nor command the resources of our country, in case of danger. Without money, without a navy, or the means of even supporting an army of our own citizens in the field, we lie at the mercy of every invader. Our sea-port towns may be laid under contribution, and our country ravaged.

By the new constitution, you will be protected, with the force of the union, against domestic violence and foreign invasion. You will have a navy to defend your coast.—The respectable figure you will make among the nations, will so far command

the attention of foreign powers, that it is probable you will soon obtain such commercial treaties, as will open to your vessels the West India islands, and give life to your expiring commerce.

In a country like our's, abounding with freemen all of one rank, where property is equally diffused, where estates are held in fee simple, the press free, and the means of information common—tyranny cannot readily find admission under any form of government: but its admission is next to impossible, under one, where the people are the source of all power, and elect, either mediately by their representatives, or immediately by themselves, the whole of their rulers.

Examine the new constitution with candour and liberality. Indulge no narrow prejudices to the disadvantage of your brethren of the other states; consider the people of all the thirteen states, as a band of brethren, speaking the same language, professing the same religion, inhabiting one undivided country, and designed by heaven to be one people. Consent that what regards all the states should be managed by that body which represents all of them: be on your guard against the misrepresentations of men who are involved in debt; such may wish to see the constitution rejected, because of the following clause, “no state shall emit bills of credit, make any thing, but gold and silver coin, a tender in payment of debts, pass any *ex post facto* law, or law impairing the obligation of contracts.” This will doubtless bear hard on debtors who wish to defraud their creditors: but it will be of real service to the honest part of the community. Examine well the characters and circumstances of men who are averse to the new constitution. Perhaps you will find that the above recited clause is the real ground of the opposition of some of

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them, though they may artfully cover it with a splendid profession of zeal for state privileges and general liberty.

On the whole, if the proposed constitution be not calculated to better your country, and to secure to you the blessings for which you have so successfully contended, reject it: but if it be an improvement on the present confederation, and contains, within itself, the principles of farther improvement, suited to future circumstances, join the mighty current of federalism, and give it your hearty support. You were among the first states that formed an independent constitution; be not among the last in accepting and ratifying the proposed plan of federal government; it is your sheet anchor; and without it independence may prove a curse.



Letter from dr. Rush, to dr. Ramsay.

Dear sir,

I Presume, before this time, you have heard, and rejoiced in the auspicious event of the ratification of the federal government by six of the united states.

“The objections, which have been urged against the federal constitution, from its wanting a bill of rights, have been reasoned and ridiculed out of credit in every state that has adopted it. There can be only two securities for liberty in any government, viz. representation and checks. By the first, the rights of the people, and by the second, the rights of representation are effectually secured. Every part of a free constitution hangs upon these two points; and these form the two capital features of the proposed constitution of the united states. Without them, a volume of rights would avail nothing; and with them, a declaration of rights is absurd and unnecessary: for the peo-

ple, where their liberties are committed to an equal representation, and to a compound legislature, such as we observe in the new government, will always be the sovereigns of their rulers, and hold all their rights in their own hands. To hold them at the mercy of their servants, is disgraceful to the dignity of freemen. Men, who call for a bill of rights, have not recovered from the habits they acquired under the monarchical government of Great Britain.

“I have the same opinion with the antifederalists, of the danger of trusting arbitrary power to any single body of men: but no such power will be committed to our new rulers. Neither the house of representatives, the senate, or the president, can perform a single legislative act by themselves. An hundred principles in man will lead them to watch, to check, and to oppose each other, should an attempt be made by either of them upon the liberties of the people. If we may judge of their conduct, by what we have so often observed in all the state-governments, the members of the federal legislature will much oftener injure their constituents, by voting agreeably to their inclinations, than against them.

“But are we to consider men entrusted with power, as the receptacles of all the depravity of human nature? by no means. The people do not part with their full proportions of it. Reason and revelation both deceive us, if they are all wise and virtuous. Is not history as full of the vices of the people, as it is of the crimes of the kings? what is the present moral character of the citizens of the united states? I need not describe it. It proves too plainly, that the people are as much disposed to vice as their rulers; and that nothing but a vigorous and efficient government can prevent their degenerating into savages, or devouring each other like beasts of prey.

"A simple democracy has been very aptly compared by Mr. Ames, of Massachusetts, to a volcano that contained within its bowels the fiery materials of its own destruction. A citizen of one of the cantons of Switzerland, in the year 1776, refused in my presence to drink "the commonwealth of America" as a toast, and gave as a reason for it, "that a simple democracy was the devil's own government." The experience of the American states, under the present confederation, has, in too many instances, justified these two accounts of a simple popular government.

"It would have been a truth, if Mr. Locke had not said it, that where there is no law, there can be no liberty; and nothing deserves the name of law but that which is certain, and universal in its operation, upon all the members of the community.

"To look up to a government that establishes justice, insures order, cherishes virtue, secures property, and protects from every species of violence, affords a pleasure that can only be exceeded by looking up, in all circumstances, to an over-ruling providence. Such a pleasure, I hope, is before us and our posterity, under the influence of the new government.

"The dimensions of the human mind are apt to be regulated by the extent and objects of the government under which it is formed. Think then, my friend, of the expansion and dignity the American mind will acquire, by having its powers transferred from the contracted objects of a state, to the more unbounded objects of a national government!—A citizen and a legislator of the free and united states of America, will be one of the first characters in the world.

"I would not have you suppose, after what I have written, that I be-

lieve the new government to be without faults. I can see them—yet not in any of the writings or speeches of the persons who are opposed to it. But who ever saw any thing perfect come from the hands of man? it realises, notwithstanding, in a great degree, every wish I ever entertained, in every stage of the revolution, for the happiness of my country; for you know, that I have acquired no new opinions or principles, upon the subject of republics, by the sorrowful events we have lately witnessed in America. In the year 1776, I lost the confidence of the people of Pennsylvania, by openly exposing the dangers of a simple democracy, and declaring myself an advocate for a government composed of three legislative branches.



Address to the people of Maryland.

THE following facts, disclosing the conduct of the late convention of Maryland, are submitted to the serious consideration of the citizens of the state.

On Monday, the 21st of April, the convention met in Annapolis, and elected the honourable George Plater, esq. president. On Tuesday, they established rules for the conduct of business; and, on the same day, the following question was propounded to the convention:

"When a motion is made and seconded, the matter of the motion shall receive a determination by the question, or be postponed, by general consent, or the previous question, before any other motion shall be received."

And the following question, viz.

"Every question shall be entered on the journal; and the yeas and nays may be called for, by any member, on any question, and the name of the member requiring them, shall be entered on the journal,

Which two questions, the convention determined in the negative.

On Wednesday, the proposed plan of government was read the first time, and thereupon it was resolved, "That this convention will not enter into any resolution upon any particular part of the proposed plan of federal government for the united states: but that the whole thereof shall be read through a second time, after which, the subject may be fully debated and considered; and then the president shall put the question, "That this convention do assent to and ratify the same constitution." On which question, the yeas and nays shall be taken.

On Thursday, the members who were opposed to the ratification of the constitution, without such previous amendments could be obtained, as they thought essentially necessary to secure the liberty and happiness of the people (being confined by the last resolution to consider in one view the whole of the plan of government) stated some of their objections to the constitution. "The convention met in the evening, when mr. Paca, member from Hartford, having just taken his seat, rose, and informed the president, that he had great objections to the constitution proposed, in its present form, and meant to propose a variety of amendments, not to prevent, but to accompany the ratification; but, having just arrived, he was not ready to lay them before the house; and requested indulgence until the morning, for that purpose. The proposal being seconded, and the house asked if they would give the indulgence, it was granted without a division, and they adjourned for that purpose. On Friday, at the meeting of the house, mr. Paca rose, and informed the president, that, in consequence of the permission of the house, given him the preceding evening, he had pre-

pared certain amendments, which he would read in his place, and then lay on the table, when he was interrupted, and one member from each of the following counties, viz. Frederick, Talbot, Charles, Kent, Somerset, Prince George's, Worcester, Queen-Ann's, Dorchester, Calvert, and Caroline, and one member from the * city of Annapolis, and one from Baltimore-town, arose in their places, and declared, for themselves and their colleagues, "that they were elected and intrusted by the people they represented, to ratify the proposed constitution, and that as speedily as possible, and to do no other act; that after the ratification, their power ceased, and they did not consider themselves as authorized by their constituents to consider any amendments." After this, mr. Paca was not permitted even to read his amendments. The opponents continued to make their objections to the constitution, until Saturday noon. The advocates of the government, although repeatedly called on, and earnestly requested, to answer the objections, if not just, remained inflexibly silent, and called for the question, that "the convention assent to and ratify the proposed plan of federal government for the united states." Which was carried in the affirmative, by sixty-three to eleven.

The vote of ratification having thus passed, mr. Paca again rose, and laid before the convention his propositions for amending the constitution thus adopted, which he had prepared

NOTE.

* The member from the city of Annapolis, did not give it as his opinion, that he was not at liberty to consider amendments; but said he had consulted his colleague, and that his colleague had informed him, the citizens were against amendments.

ave of the house; declaring that d only given his assent to the nment under the firm persuasid in full confidence, that such dments would be peaceably ob- l, as to enable the people to happy under the government: he people of the county he re- ted, and that he himself, would rt the government with such dments; but, without them, not n in the state, and no people, l be more firmly opposed to it himself and those he represented. ments highly favourable to a- ments were expressed, and a ge- murmur of approbation seemed e from all parts of the house, sive of a desire to consider a- ments, either in their characters nbers of convention, or in their dual capacities as citizens; and ession was put on the following n:

Resolved, That a committee be nted to take into consideration eport to this house on Monday ng next, a draught of such dments and alterations as may be ht necessary, in the proposed tution for the united states, to ommended to the consideration e people of this state, if approv- by this convention; and mr. mr. Johnson, mr. S. Chase, otts, mr. Mercer, mr. Golds- gh, mr. J. Tilghman, mr. on, mr. J. T. Chase, mr. Lee, V. Tilghman, mr. M^cHenry, mr. G. Gale, be appointed a mtee for that purpose."

division was called for on this ction, when there appeared sixty- mbers for, and not more than e against it.

nd then it was resolved, "That endments proposed to the con- on by the delegate from Hart- county should be referred to the e committee."

e committee thus appointed, the

convention adjourned to give them time to prepare their propositions; and they proceeded, with every appear- ance of unanimity, to execute the trust reposed in them.

The following amendments to the proposed constitution were separately agreed to by the committee, most of them by an unanimous vote, and all of them by a great majority.

1. That congress shall exercise no power, but what is expressly delegat- ed by this constitution.

By this amendment, the general powers given to congress by the first and last paragraphs of the 8th sect. of art. 1, and the second paragraph of the 6th article, would be in a great measure restrained; those dangerous expressions, by which the bills of rights and constitutions of the several states may be repealed by the laws of congress, in some degree moderated, and the exercise of constructive pow- ers wholly prevented.

2. That there shall be a trial by jury in all criminal cases, according to the course of proceeding in the state where the offence is committed; and that there be no appeal from matter of fact, or second trial after acquittal; but this provision shall not extend to such cases as may arise in the government of the land or naval forces.

3. That in all actions on debts or contracts, and in all other controver- sies respecting property, of which the inferior federal courts have juris- diction, the trial of facts shall be by jury, if required by either party; and that it be expressly declared, that the state courts, in such cases, have a concurrent jurisdiction with the fe- deral courts, with an appeal from ei- ther, only as to matter of law, to the supreme federal court, if the matter in dispute be of the value of dollars.

4. That the inferior federal courts shall not have jurisdiction of less than

dollars : and there may be an appeal in all cases of revenue, as well to matter of fact as law ; and congress may give the state courts jurisdiction of revenue cases, for such sums, and in such manner, as they may think proper.

5. That in all cases of trespasses done within the body of a county, and within the inferior federal jurisdiction, the party injured shall be entitled to trial by jury in the state where the injury shall be committed ; and that it be expressly declared, that the state courts, in such cases, shall have concurrent jurisdiction with the federal courts ; and there shall be no appeal from either, except on matter of law ; and that no person be exempt from such jurisdiction and trial, but ambassadors and ministers privileged by the law of nations.

6. That the federal courts shall not be entitled to jurisdiction by fictions or collusion.

7. That the federal judges do not hold any other office of profit, or receive the profits of any other office under congress, during the time they hold their commission.

The great objects of these amendments were 1st. To secure the trial by jury in all cases, the boasted birth-right of Englishmen, and their descendants, and the palladium of civil liberty ; and to prevent the appeal from fact, which not only destroys that trial in civil cases, but, by construction, may also elude it in criminal cases ; a mode of proceeding both expensive and burdensome, and which by blending law with fact, will destroy all check on the judiciary authority, render it almost impossible to convict judges of corruption, and may lay the foundation of that gradual and silent attack on individuals, by which the approaches of tyranny become irresistible. 2d. To give a concurrent jurisdiction to the state

courts, in order that congress may be compelled, as they will be in the present form, to establish in federal courts, which, if not necessary, will be inconvenient, and merous, very expensive ; the distances of the people being unequal the increased expense of courts, and double officers ; a arrangement that will render the complicated and confused, that men can know how to conduct themselves with safety to their property, the great and only security of freemen. 3dly. To give jurisdiction to the state courts, transient foreigners, and persons from other states, committing injuries in this state, may be amenable to the state whose laws they violate, whose citizens they injure. 4th. To prevent an extension of the federal jurisdiction, which may, and probability will, swallow up the state jurisdictions, and consequently those rules of descent and regulation of personal property, by which they hold their estates ; and lastly, to secure the independence of the federal judges, to whom the happiness of the people of this great continent is so greatly committed by the extensive powers assigned them.

8. That all warrants without oath or affirmation of a person conscientiously scrupulous of taking an oath to search suspected places, or seize a person or his property, are gross and oppressive : and all general warrants to search suspected places, to apprehend any person suspected, without naming or describing the person in special, are dangerous and ought not to be granted.

This amendment was considered indispensable by many of the committee ; for congress having the power of laying excises, the horror of which to the people, by which our dwelling houses and those callles considered so sacred by the English law, will be laid

ie insolence and oppression of
there could be no constituti-
check provided, that would
so effectual a safeguard to our
ns. General warrants, too, the
engine by which power may
by those individuals who resist
ation, are also hereby forbid to
magistrates who are to admini-
the general government.

That no soldier be enlisted for
ger time than four years, except
ne of war, and then only during
war.

. That soldiers be not quartered
ne of peace upon private houses,
out the consent of the owners.

. That no militia bill continue
orce longer than two years.

ese were the only checks that
be obtained against the unlimit-
power of raising and regulating
ing armies, the natural enemies
edom: and even with these re-
ons, the new congress will not
der such constitutional restraints
e parliament of Great Britain—
ints, which our ancestors have
to establish, and which have hi-
o preserved the liberty of their
erty.

. That the freedom of the press
violably preserved.

prosecutions in the federal courts
ibels, the constitutional preserva-
of this great and fundamental
, may prove invaluable.

. That the militia shall not be
ect to martial law, except in time
war, invasion, or rebellion.

his provision to restrain the pow-
of congress over the militia, al-
gh by no means so ample as that
vided by magna charta, and the
r great fundamental and constitu-
al laws of Great Britain, (it be-
contrary to magna charta, to pu-
a freeman by martial law in time
peace, and murder, to execute
) yet it may prove an inestimable
ck; for all other provisions in

favour of the rights of men, would be
vain and nugatory, if the power of
subjecting all men, able to bear arms,
to martial law at any moment, should
remain vested in congress.

Thus far the amendments were agreed
to.

The following amendments were
laid before the committee, and nega-
tived by a majority.

1. That the militia, unless select-
ed by lot, or voluntarily enlisted, shall
not be marched beyond the limits of
an adjoining state, without the con-
sent of their legislature or executive.

2. That the congress shall have no
power to alter or change the time,
place, or manner of holding elections
for senators or representatives, unless
a state shall neglect to make regulati-
ons, or to execute its regulations, or
shall be prevented by invasion or re-
bellion; in which cases, only, con-
gress may interfere, until the cause be
removed.

3. That in every law of congress,
imposing direct taxes, the collection
thereof shall be suspended for a cer-
tain reasonable time, therein limited;
and on payment of the sum by any
state, by the time appointed, such
taxes shall not be collected.

4. That no standing army shall be
kept up in time of peace, unless with
the consent of two thirds of the mem-
bers present, of each branch of con-
gress.

5. That the president shall not com-
mand the army in person, without the
consent of congress.

6. That no treaty shall be effectual
to repeal or abrogate the constitutions
or bills of rights of the states, or any
part of them.

7. That no regulation of commerce
or navigation act, shall be made,
unless with the consent of two thirds
of the members of each branch of con-
gress.

8. That no member of congress
shall be eligible to any office of pro-

fit under congress, during the time for which he shall be appointed.

9. That congress shall have no power to lay a poll-tax.

10. That no person conscientiously scrupulous of bearing arms in any case, shall be compelled personally to serve as a soldier.

11. That there be a responsible council to the president.

12. That there be no national religion established by law; but that all persons be equally entitled to protection in their religious liberty.

13. That all imposts and duties laid by congress shall be placed to the credit of the state in which the same shall be collected, and be deducted out of such state's quota of the common or general expenses of government.

14. That every man hath a right to petition the legislature for the redress of grievances, in a peaceable and orderly manner.

15. That it be declared, that all persons entrusted with the legislative or executive powers of government, are the trustees and servants of the public, and, as such, accountable for their conduct. Wherefore, whenever the ends of government are perverted, and public liberty manifestly endangered, and all other means of redress are ineffectual, the people may, and of right ought to reform the old, or establish a new government: the doctrine of non-resistance against arbitrary power and oppression, is absurd, slavish, and destructive of the good and happiness of mankind.

The committee having proceeded thus far, all the members who voted for the ratification, declared, that they would engage themselves under every tie of honour, to support the amendments they had agreed to, both in their public and private characters, until they should become a part of the general government; but a great majority of them insisted on this express

condition, that none of the propositions rejected, or any others, should be laid before the convention for consideration, except those the committee had agreed to.

The gentlemen of the minority who had made the propositions which had been rejected, reduced to the necessity of accommodating their sentiments to the majority, through fear of obtaining no security whatever for people—notwithstanding they considered all the amendments as highly important to the welfare and happiness of the citizens of the states, to conciliate, they agreed to consent themselves to the first three of the propositions, and solemnly declared and pledged themselves, that if these were added, and supported by the other gentlemen, they would not only cease to oppose the government, but give all their assistance to carry it into execution, so amended. Finally they only required liberty to take offense of the convention on the three first propositions, agreeing that they would hold themselves bound to the decision of a majority of the body.

The first of these objections, concerning the militia, they considered essential; for to march beyond the limits of a neighbouring state, the general militia, who consist of so many poor people that can ill be spared from their families and domestic concerns, by power of congress, would know nothing of their circumstances, without consent of their own legislature or executive, ought to be restrained.

The second objection, respecting the power of congress to alter election they thought indispensable. Montequieu says, that the rights of election should be established unalterably by fundamental laws, in a free government.

The third objection, concerning the previous requisition, they conceive

ighly important; they thought if money, required by direct taxation, could be paid with certainty and in due time to congress, that every good consequence would be secured to the nation, and the people of the state thereby relieved from the great inconvenience and expence of a double collection and a double set of tax-gatherers; and they might also get rid of those odious taxes by excise and poll, without injury to the general government.

They were, however, again proposed and rejected.

Affirmative—Mr. Paca, mr. Johnson, mr. Mercer, mr. J. T. Chafe, mr. S. Chafe.

Negative—Mr. Lee, mr. Potts, mr. Goldsborough, mr. J. Tilghman, mr. W. Tilghman, mr. Hanson, mr. G. Gale, mr. M^cHenry.

Previous to this, a motion was made on Monday the 29th, in the convention, while the committee were sitting, in the following words, to wit: "Resolved, that this convention will consider of no propositions for amendment of the federal government, except such as shall be submitted to them by the committee of thirteen."

The committee being sent for by the convention, the gentlemen of the majority in committee then determined, that they would make no report of any amendments whatever, not even of those which they had almost unanimously agreed to, and the committee, under those circumstances, attended the house. Mr. Paca, as chairman, stated to the convention what had passed in the committee; read the amendments which had there been agreed to; and assigned the reason why no report had been formally made. A member then rose, and proposed that a vote of thanks to the president, which had been once read before the attendance of the committee, should have a second reading; and upon the second reading thereof,

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the previous question was called for by the members who wished to consider the amendments agreed to by the committee, and such other amendments as might be proposed. The house thereupon divided, and the yeas and nays were called for by the minority; the sense of the convention was taken thereon: and a majority determined that the yeas and nays should not be taken, nor would they permit the vote to be entered on the journal, by which the yeas and nays were prohibited: to preclude the consideration of any amendments.

A motion was then made, "that the convention adjourn without day," on which the yeas and nays were taken, and appeared as follow:

AFFIRMATIVE. The honourable the president, messrs. Barns, Chilton, Sewell, W. Tilghman, Yates, Granger, Chesley, Smith, Brown, Turner, Stone, Goldsborough, Stevens, G. Gale, Waggaman, Stewart, J. Gale, Sulivane, Shaw, Gilpin, Hollingsworth, Heron, Evans, O. Sprigg, Hall, Diggers, Hanson, J. Tilghman, Hollyday, Hemfley, Morris, Lee, Potts, Faw, J. Richardson, Edmondson, M^cHenry, Coulter, T. Sprigg, Stull, Rawlins, Shryock, Cramphin, Thomas, Deakins, Edwards. 47.

NEGATIVE. Messrs. Perkins, J. T. Chafe, S. Chafe, Mercer, Wilkinson, Grahame, Parnham, Ridgely, Cockey, Cromwell, Lloyd, Hammond, Bowie, Carroll, Seney, Chail-lé, Martin, Done, Johnson, Paca, Love, Pinkney, L. Martin, W. Richardson, Driver, and Harrison. 27

We consider the proposed form of national government as very defective, and that the liberty and happiness of the people will be endangered if the system be not greatly changed and altered. The amendments agreed to by the committee, and those proposed by the minority, are now laid before you for your consideration.

tion, that you may express your sense as to such alterations as you may think proper to be made in the new constitution.

We remain persuaded, that the importance of the alterations proposed, calculated to preserve public liberty, by those checks on power which the experience of ages has rendered venerable, and to promote the happiness of the people by a due attention to their ease and convenience, will justify the steps we have taken to obtain them, to our constituents, and the world.

Having no interest that can distinguish us from the rest of the community, we neither fear censure, nor wish applause. Having thus discharged the duty of citizens and trustees of the public, we shall now submit to the people those precautions and securities, which, after mature reflection on this momentous subject, we deem necessary for their safety and happiness.

May that all-wise and omnipotent Being, who made us masters of a fair and fruitful empire, inspire us with wisdom and fortitude to perpetuate to posterity that freedom which we received from our fathers!

William Paca,	} Members of the com- mittee.
Samuel Chase,	
John F. Mercer,	
Jeremiah T. Chase.	
John Love,	} Mem- bers of conven- tion.
Charles Ridgely,	
Edward Cockey,	
Nathan Cromwell,	
Charles Ridgely, of Wm.	
Luther Martin,	
Benjamin Harrison,	
William Pinkney.	

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Mr. Printer,

IN the address to the people of Maryland there is a mistake, relative to the declaration of the mem-

ber from the city. His meaning was, and he thinks his expressed word were, that upon consulting his colleague respecting amendments to the federal government, he was of opinion, that the representatives of the city were not authorized to consider or agree to amendments; and not that the citizens were against any the expression used in the above address. His colleague observed, that the matter had never been submitted to their constituents, and they having made no expressed declaration, he did not consider the delegation of the city at liberty to act in this particular. It may be remembered that this declaration of the member from the city was made at that period when the idea was, that the amendments agreed to, should accompany the instrument of ratification to New York, and not in the latter stage of the business, when that idea was dropped, and it was proposed to refer them to the consideration of the people, from whom, if approved, they were to pass to congress through the medium of the legislature. — *Annapolis, May 7, 1788.*

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Address to the honourable the members of the convention of Virginia.—Ascribed to T. C. Esq.

BY the special delegation of the people of your respectable commonwealth, you are shortly to determine on the fate of the proposed constitution of federal government. First invited to that important measure by the resolutions of your legislature, from the wisest considerations, America, confiding in the steadiness of your patriotism, and feeling that new weight is daily given to your original inducements, doubts not it is now to receive your sanction. But before the awful determination which

to call the American union once more into political existence, shall be finally taken, permit one of the most respectful of your countrymen to trespass a few minutes on your time and patience.

The qualities of the proposed government have been so fully explained, and it will receive such further exposition in your honourable body, that it is needless to attempt a regular discussion of the subject. This paper shall, therefore, be confined to a few particular considerations, that have been already mentioned by others, or which may now be suggested for the first time.

It has been urged, by some sensible and respectable men, that your extensive state will not be properly represented in the federal senate. Permit me to remind you, that, altho' you have but one vote of thirteen in the present union, you will have twelve in ninety-one in the new confederacy. Suffer me to observe, too, that, as the united states are free governments, it might not have been very unreasonable, if the people of Virginia could have given only the same number of votes, at an election for federal purposes, as they can give at a state election. If the citizens of Virginia find it wise and prudent, that free persons only shall be taken into consideration, in electing their state legislature, would it appear extraordinary, that the citizens of the united states should think the same rule proper in electing the federal representatives? By the present arrangement, you may enjoy the weight and power of five votes and a half for 168,000 slaves, being three fifths of your whole number of blacks. Were these to be deducted from the votes of Virginia, in the federal house of representatives, it would leave little more than one vote in thirteen, in that house. In the present congress, as before observed, and in the proposed senate, a

thirteenth vote is allotted to Virginia. Taking the number of free citizens, which is the proper rule of representation in free governments, Virginia, in the federal representation, would have about as many votes as New York, and fewer than Massachusetts or Pennsylvania. It will be proper to consider, too, the effect of the erection of Kentucke into a separate state, and of her becoming another member of the new confederacy. When that certain event shall take place, Virginia will fall considerably short of the proportion of one in fourteen of the free white inhabitants of the united states. Impartially considering this true state of things, the opinion, that Virginia will hold a share of the powers of the new government, less than she is entitled to, will appear to be erroneous. If, on examination, these facts shall be found to be stated with accuracy and candour, and the observations and reasonings upon them shall appear just and fair, we confidently trust your honourable house will not consider the proposed constitution as exceptionable in that particular.

Objections have been made, by some very respectable gentlemen of your state, to the power of congress, under the new federal constitution, to regulate trade "by a bare majority." In a free government, the voice of the people, expressed by the votes of a majority, must be the rule; or we shall be left without any certain mode to determine what is politically right. To depart from it, is establishing tyranny by law. It would be a solemn renunciation of the forms and substance of liberty; and our affairs, on this dangerous principle, must rapidly hasten to an oligarchy—the most dreadful of all governments. It would be in vain to say we might be restrained by one third, in commercial cases, and free in all others. The precedent once established, it requires

no prophetic gift to foresee where it would end. But, independent of the violation of this great principle of free governments, the objection and the apprehensions arising from it are founded on a misconception of the true nature of affairs in all the states. The landed interest must ever possess a commanding majority in the state and federal legislatures. It was supposed the objection ought to have great weight in the five southern states. But we do not find it has been even mentioned, in the Maryland or Georgia conventions, the only two of them which have yet determined on the constitution, nor was it noticed in New Jersey or Delaware, which are the least commercial members of the confederacy. Four of the agricultural states have considered this objection and these fears as unfounded, for they have adopted the constitution with only eleven dissentient votes.

The rejection of the government by the state of Virginia, should eight states have previously adopted it, is a matter (permit me respectfully to observe) the possible consequences of which should be most seriously considered. Should a ninth state ratify the constitution, after you have declined to do so, it will become a binding compact—an operative system. The American states would deeply regret a circumstance, that should place a most respectable member of the present union, and a natural born elder sister, in the character of an alien: and a late and reluctant adoption, not arising altogether from free choice and national affection, would exceedingly abate that cordial joy, which will flow throughout the land at the early adoption of the proposed constitution by your ancient state, whence the first call to independence was boldly given, and whence first arose this great attempt to cement and invigorate the union.

The united states, whatever has been the cause of past events, may certainly become a nation of great respectability and power. But such is the effect of our distracted politics and of the feebleness of our general government, that foreign powers openly declare their unwillingness to treat with us, while our affairs remain on the present footing. However favourable or friendly they may think our intentions towards them, they know we have not constitutional powers to execute our own desires even within our own dominions. Senators of no inconsiderable reputation in the British parliament have told the world, they can make no fixed arrangements with us, under the present confederation. The ministers of France, which nation has lately evinced the continuance of her friendship, by new privileges to our trade, declare they cannot proceed to the extent of their desires, since no power exists to treat upon national ground. The court of Spain, too, however they might be influenced by a firm and respectable union, will never listen to our demands for the navigation of the Mississippi, while we remain in our present unconnected situation. We are no object even of respect to them, much less of apprehension; and should the present constitution be rejected, they will laugh at all future attempts to continue or invigorate the union. Our minister, at that court, expects to effect no arrangements there, without an efficient government being first adopted here.

It has been objected to the proposed federal constitution, that it tends to render our country more vulnerable, by admitting the further importation of slaves. To perform not accurately acquainted with the whole of the American constitution: this objection may appear of weight when it is canvassed before

lightened an assembly as the convention of Virginia, the mistake will be instantly discovered. It will be remembered that ten of the states, and Virginia among the number, have already prohibited the further importation of slaves, and that the powers of the legislature of each state, even after the adoption of the constitution, will not only remain competent to the prohibition of the slave trade, but (if they find the measure wise and safe) to the emancipation of the slaves already among us. It may be added further, that the exercise of this power of the state governments can in no wise be controuled or restrained by the federal legislature.

Should the present attempt to infuse new vigour into the general government fail of success, partial confederacies must at once follow. The states on the Delaware, central in their situation, and (though not superabundantly rich) perfectly independent in their resources, will find themselves bound together by their position on the globe, by a perfect similarity of manners and interests, by the preservation of their common peace and safety, and by the innumerable ties of blood and marriage subsisting between them. A frank and liberal concession of the impost on the part of Pennsylvania, will render the inducements complete. The sentiments of the state of Maryland on the proposed government, and their existing connections with Pennsylvania and Delaware, from each of which they are divided only by an imaginary line, will turn their inclinations that way. Rather than connect themselves with a southern country, between which and them a great natural boundary is interposed, and which is rendered vulnerable, by two hundred and eighty thousand slaves, they will find it prudent, as well as agreeable, to join their northern neighbours. Should Penn-

sylvania offer to aggrandize the ports of Maryland, by opening to her the extensive navigation of the Susquehanna, whose various branches water many millions of acres of fertile lands, prudence and interest will powerfully persuade Maryland to join the middle confederacy. Should the views and propositions of this central and consolidated connexion be liberal and just, accessions of very considerable importance may be hoped for from the northern and southern states. What particular benefits then can Virginia reasonably expect from that dissolution of the confederacy, which must follow the rejection of the proposed plan?

The various parts of the North American continent are formed by nature for the most intimate union. The facilities of our navigation render the communication between the ports of Georgia and New Hampshire infinitely more expeditious and practicable, than between those of Provence and Picardy, in France; Cornwall and Caithness, in Great Britain; or Galicia and Catalonia, in Spain. The canals, proposed at South-key, Susquehanna, and Delaware, will open a communication from the Carolinas to the western counties of Pennsylvania and New York. The improvements of the Potowmack will give a passage from those southern states to the western parts of Virginia, Maryland, Pennsylvania, and even to the lakes. The canals of Delaware and Chesapeake will open the communication from South Carolina to New Jersey, Delaware, the most populous parts of Pennsylvania, and the midland counties of New York. These important works might be effected for two hundred thousand guineas, and America would thereby be converted into a cluster of large and fertile islands, easily communicating with each other, without expence, and, in

many instances, without the uncertainty or dangers of the sea. The voice of nature therefore directs us to be affectionate associates in peace, and firm supporters in war. As we cannot mistake her injunctions, to disobey them would be criminal.

The distracted state of our affairs has exceedingly retarded population and manufactures, and interrupted the influx of knowledge and riches. At the return of peace, the European world viewed America with the tender and respectful admiration of a lover to his mistress. Their peasantry and manufacturers, their merchants and philosophers, were seized with an irresistible desire to visit our shores, and many of them looked towards this country as another land of promise, to spend the remainder of their days. What has prevented their realising these fond ideas? The insecurity of property, the breach or suspension of public and private obligations, paper tenders, insurrections against state governments of our own choice, contentions among the states, and a total disregard of the most salutary and just demands of the general government. They knew us to be a people capable of great exertions. They saw we possessed a country replete with the means of private happiness and national importance, but they saw too that these inestimable properties of the Americans and their dominions were not brought into any use, from the defects of our political arrangements, and the enormous abuses in our administration. Their beloved mistress having fallen from the heights of virtue, and become a wanton, they turned from her with disgust and bitterness. Ye friends of religion and morality! ye lovers of liberty and mankind! will ye not seize this opportunity proffered you by the bounty of heaven, and save your country from contempt and wretchedness?

The voice of the people, say the most noble champions of freedom, the voice of God. Before the ratification of the new government the state of Maryland, the constituents of the conventions, which had then adopted it, were a majority of the free people of the united states. Viewing us as one nation, the constitution had then received the solemn authoritative sanction of the people. But as Maryland has since added her number, and as it is now too certain that the adoption of South Carolina will take place before the rising of your honourable house, you will view the constitution as ratified by nearly two thirds of the union. After that event, you will find, to that of eight conventions, which have determined on it, all have given it their approbation, and among them, two, containing larger numbers of free citizens than any three that are yet to decide. Rhode Island, we know, has rejected the government in an informal way; but we cannot injure you, even for a moment, by supposing that their principles and conduct could ever have insinuated themselves into your minds. We trust you will concur with us in thinking, that as the considerate approbation of the wise and good is a fair argument in favour of a public measure, so is its deliberate rejection by the weak and wicked.

The capacities of some parts of America are admirably adapted to supply the wants of others. New England, destitute of iron, and deficient in grain, can be plentifully supplied with both by the middle states. Possessed of the fisheries, and strongly inclined to ship building and navigation she can be furnished with the choicest timber from the Carolinas and Georgia. The southern states, so intersected by great waters, as to lie exposed to the depredations of the most contemptible fleets, and crowded with a danger

s species of population, when proper arrangements shall be made, and occasion shall require, can rely on the most useful and friendly aid from the north. The future wars among the naval powers of Europe will probably be general. When the house of Bourbon shall contend with Great Britain for the dominion of the ocean, Holland, Sweden, Denmark and Portugal, will seldom be unconcerned spectators. The prosperity of agriculture in the northern states, in the event of a general war in Europe, will depend on the shipping of the middle and eastern states; for the belligerent powers will navigate under a very high insurance, and their ships will moreover be a precarious dependence, from the innumerable accidents of war. It may be said, the southern states will have shipping of their own, of which there can be no doubt, so far as the state of commerce may render them profitable in time of peace; but the sudden and vigorous exertions of the states inhabited by the whites, can alone furnish an immediate supply for the retiring vessels of the belligerent foreigners. Were we to suppose for a moment that Virginia had rejected the proposed constitution, and that Georgia, South Carolina, and Maryland were members of the new confederacy, the agricultural interests of Virginia would be exceedingly injured. The supplies of tobacco, furs, wheat, sugar, cotton, corn, naval stores and lumber, required for the consumption of manufactures, and ships of the new union, would doubtless be taken from the states that should belong to it, while the interfering produce of Virginia probably would not be admitted; or, if admitted, would be liable to the foreign impost of five per cent. Every hundred of her tobacco would pay one fourth of a dollar in Boston, New York or Philadelphia,

every barrel of her flour one fifth of a dollar, every hundred weight of her cotton a dollar and two thirds, every bushel of her wheat, above two pence sterling; a tax greatly superior in value to the revenue imposed, under her present laws, on the exportation of her own produce. Besides this, the expence of maintaining a separate establishment in government at home and abroad would come heavily on Virginia and those states that might join a small confederacy. This expence, we may almost venture to affirm, would be insupportable, especially when we consider the present state of money matters in every part of America.

Should Virginia entertain the idea of a small confederacy, would it not be wise to consider, who would probably unite in it, and upon what terms? From the debates in the Connecticut and Massachusetts conventions, as well as the dispositions and habits of those genuine republicans, is it probable that they would consent to give you a share of power, greater than your proportion of free white inhabitants? or is it probable, that your nearest neighbour, North Carolina, would consent to it, without your paying into the common treasury the neat proceeds of all duties on imports and exports, a great part of which is raised on their consumption of foreign articles, and the produce of their farms? It would now be in vain, should New York refuse a share of her impost to Connecticut and New Jersey, or Pennsylvania a share of hers to New Jersey and Delaware; or Virginia a share of hers to North Carolina. It is an idea as just, as it is generous and liberal, that the imposts of the united states should go into a common treasury, belonging to all who pay them, by being the consumers: and if North Carolina has a clear conception of her

most evident interests, she must make this article a *fine qua non* in any compact that may be proposed to her by your state.

It will be urged, perhaps, that property should be represented, and that tho' Virginia has only 252,000 free inhabitants, your representation should still be greater than that of Massachusetts and Pennsylvania, because you are richer. But surely this argument will not be urged by the friends of equal liberty among the people. It will not be openly objected against the proposed constitution, that it secures the equal liberties of the poor. But suppose for a moment, a claim for a representation of property were admissible before an assembly of the free and equal citizens of America, will not Virginia enjoy the advantage of two votes more in the federal government than either Massachusetts or Pennsylvania, though each of those states has 108,000 free citizens more than yours? If we were represented by that only rule of republics, for your ten representatives, Massachusetts would have more than fourteen, and Pennsylvania the same number, while both of them are limited to eight. Here then we see the balance of property, said to be in favour of Virginia, has procured her three fourths as much extra power, as the lives, liberties and property of all the people of Massachusetts or Pennsylvania. Power has been given to your state with no sparing hand. You (suffer me respectfully to say so) of all the members of the union, appear to have the least cause of complaint. Permit me to remind you of the objections made on this ground by Mr. Martin, of Maryland. The opposition there asserted that the great states had too large a share of power; and you have the most of all. The same sentiments were urged in the Connecticut convention. Is it probable then that an

allotment of power more favourable to you would be made by a new convention? I submit to your candour whether you ought to ask a greater share. A comparison, in point of wealth and resources, between your state and any other, is a matter which I wish to touch with delicacy. I mean not to offend, but you would despise a freeman, that would decline the decent expression of his thoughts on so momentous an occasion. I would submit to you, whether the energy of 250,000 whites in a southern climate, surrounded by more than 1,000,000 many slaves, can be, or rather is equal to that of the same number in a northern climate? Whether two or three negroes in Virginia will be found equal to one yeoman or manufacturer of Pennsylvania or Massachusetts? Whether the ships, mercantile capitals, houses, and monied corporations of Philadelphia, with her growing manufactures and connexions in foreign commerce, may not be placed in the scale against the balance of wealth you may be thought to possess, when Kentucky shall become an independent member of the American union.

But, gentlemen, it will be improper to trespass longer on your valuable time, devoted as it is to the most important concerns of Virginia, America,—and mankind. Let me intreat you only to bear in mind the wide difference that exists in the opinions and views of those who oppose the new constitution. You will find they differ as much from each other as they dissent from the friends of the plan. Were there no other people in America but the opposers of the proposed government, it will appear, on a fair statement of their various views and objections, that any constitution which could be formed, on the principles of those in some states, would meet with as much disapprobation by those in others, as they have deemed it no

lary to shew to the propositions of a federal convention. Consider then, in the event of your rejection, what a condition we shall be left into what a situation we may be thrown! thirteen jarring sovereignties—two or three contending confederacies—or a feeble union—will be a miserable and hopeless alternative. The measure of foreign conquest will be filled up. Insult will naturally follow, and then injuries road—while the certain dangers to liberty, property, and peace, at home, will sink every American, however firm, into despondency, or drive him to despair. But this will be too much. The convention of Virginia will never be instrumental in bringing such evils on the united states. No.—we will confidently hope that those among you, who do not altogether prove the proposed government, will yet concur in the measure, to save their country from anarchy and ruin. They will remember the promise to obtain amendments, and will recollect that the power will continue with the people at large in all time to come. May 21, 1788.



Remarks on the conduct of Spain, with respect to the navigation of the river Mississippi.

A COMPANY of about forty persons set off early last summer from Augusta, for the Natchez: they went through the Creek's towns, not knowing who they were, nor their business, suffered them to pass without molestation; but soon sent a party after them, to cut them off: happily our people had got into the plains, on the western side of the mountains, before the Indian party could come up with them; disappointed in their expectation of waylaying them in the defiles, they dropt the pursuit.

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On their arrival at the Natchez, they found the garrison of the fort to consist only of a captain's command, about forty men. The lieutenant governor was rather alarmed at their visit, and in a short time a reinforcement of three hundred regulars came up. The first uneasiness of the commandant having subsided, our people were treated with politeness, but not suffered to do any business with the inhabitants, especially in the land way.

By what could be learned from the lieutenant governor, they had no prohibition from the court of Spain, to deliver up the fort and the territory on the Mississippi, down to the 31° north latitude; but at the same time, they had received no orders for complying with that part of the last general treaty of peace.

The commandant, by way of conversation, assured our people, that if the ministry of Spain knew, as well as he did, the value of that most fertile country, they would never give it up, until driven from it by a superior force: a spirited American gentleman replied to him, "it would be a very impolitical step; for should the united states be compelled to be at the expence of sending an army to possess themselves of the Natchez (their undoubted right) he could not expect the Americans would stop at the 31° latitude; that nothing short of all West Florida, down to the very mouth of the Mississippi, would satisfy them for the unnecessary expence they would have been put to, by the noncompliance of Spain with the treaty."

The Spaniards claim all the territory lying west of the Apalachian mountains; as far up as the mouth of the Ohio, comprehending the back parts of Georgia, South-Carolina, North-Carolina, and part of Virginia; the very same claim as that of the French, when in possession of Canada.

nada and Louisiana, and which was the cause of the war in 1755.

The absurdity of these pretensions is so evident, that the Spanish government will never attempt to assert them. However, we ought to lose no time in insisting on a definitive answer from his most catholic majesty, on the evacuation of fort Natchez, and the cession of the territory, down to the 31^o north latitude, agreeable to the tenor of the last treaty of peace: on a refusal from Spain, congress's ultimatum should be notified by our minister, containing a positive declaration, that we will do that justice to ourselves which is denied us by them. No danger can arise from such spirited measures; for the weakness of the Spaniards, both in Florida and Louisiana, will not permit them to enter into an unjust contention, which would endanger even their rich empire of Mexico; and the more so, as they have a formidable intestine enemy in all the natives of South America, who most undoubtedly would not lose the favourable opportunity of hostilities between Spain and America, in Louisiana, to contend for, and wrest that independency from Old Spain which they have been struggling for, many years. Besides, Spain could expect no assistance from other powers: as France, England, and Holland, are guarantees of the treaty, an infringement of which, by Spain, would be the motive of the rupture.

Should Spain, deaf to all these considerations, be so blind to her own interest, as to force us in defence of our own, to take up arms against her, it is in the natural order of things to presume, that the event would prove the ruin of the Spanish monarchy, and raise the glory and prosperity of the united states. As it would degrade us in the eyes of Europe, to commence hostilities on Spain without any just cause, so it

would equally reflect the greatest dishonour on us, to tamely submit this breach of faith from the Spaniards.

A war with Spain, to which we may be compelled, in vindication of our rights, must be of great advantage to America. In lieu, as in the last contest, of fighting in our own country, where we had to supply the enemy's armies, as well as our own, we could make the rich Spanish settlements the theatre of hostilities: our armies would be supplied with their provisions, and paid out of their gold and silver. Two thousand brave Americans, under experienced officers, animated with resentment against those troublesome neighbours, and having in object the conquest of the richest country in the world, would complete, in a few weeks, from their arrival at the Natchez, the reduction of West Florida and Louisiana, in spite of all the Spanish efforts to resist us. Another army of about the same number of men, leaving the first conquerors to defend the new acquisitions at the expence of the same, would carry the war into the very heart of Mexico. An expedition of this consequence would cost little or nothing to the united states, and would insure to us, forever, the free and undisturbed navigation of the Mississippi, as, by the situation of the country, five hundred men can, at all times, be masters of this river, provided they are in possession of the upper parts of it, from which all supplies must come, and where innumerable fleets might be constructed.

The greatest objection that may be offered to our success, is the deficiency of a navy to protect our trade and guard our coasts against the enemy's enterprizes. We need no fleet for the conquest proposed, nor to protect them: besides, we have a right to expect assistance from England and

land, agreeable to the treaty ;
 France undoubtedly would keep
 neutrality. Every power of Eu-
 rope must be sensible how much it
 could be to their advantage, that we
 should be in possession of the gulph
 of Mexico. Spain will suffer no dan-
 ger to trade in that rich country ;
 it becoming part of the united
 states, all the trading nations would
 be indiscriminately admitted, there-
 fore it would be their interest to help
 with a navy against Spain : and
 should it be required, we would be
 able to pay the expences with Spa-
 nish gold. Whatever steps the mari-
 time powers may take towards us, it is
 certain, that the American seas would
 be covered, on a rupture with Spain,
 with swarms of privateers from all
 nations, under the colours of the
 United States.

Our settlements on the western
 waters are increasing in strength dai-
 ly ; near 100 miles on Cumberland
 river are now settled, and emigrants
 from the Carolinas and Virginia,
 are constantly travelling to Kentuc-
 ky and Cumberland. Those two set-
 tlements, alone, supplied with boats
 and ammunition, could muster, even
 now, a force sufficient to make the
 conquest of Florida and Louisiana ;
 and thousands of volunteers would
 flock to arms, and would be zealous
 to join in so promising an expedition.
 Should Spain comply fully with
 the treaty, and only insist on some
 restriction as to the navigation of the
 Mississippi, it would perhaps be more
 political to postpone to a more re-
 mote time, all thoughts of conquest.

F A B I U S.

Charleston, April 6, 1786.

*Circular letter directed to the different
 courts in the western country.*

Kentucke, Danville, March 29, 1787.

Gentlemen,

A Respectable number of the in-
 habitants of this district ha-
 ving met at this place, being greatly
 alarmed at the late procedure of con-
 gress, in proposing to cede to the
 Spanish court, the navigation of the
 Mississippi river, for 25 or 30 years,
 have directed us to address the inha-
 bitants on the western waters, and
 inform them of the measures which
 it is proposed for this district to
 adopt.

The inhabitants of the several
 counties in this district, will be re-
 quested to elect five members in each
 county, to meet at Danville, on the
 first Monday in May, to take up the
 consideration of this project of con-
 gress ; to prepare a spirited, but de-
 cent remonstrance against the cession ;
 to appoint a committee of correspon-
 dence, to communicate with one al-
 ready established on the Monongaha-
 lia, or any other that may be consti-
 tuted ; to appoint delegates to meet
 representatives from the several dis-
 tricts on the western waters in
 convention, should a convention be
 deemed necessary ; and to adopt such
 other measures, as shall be most con-
 ductive to our happiness. As we con-
 ceive that all the inhabitants residing
 on the western waters, are equally
 affected by this partial conduct of
 congress, we doubt not but they will
 readily approve of our conduct, and
 cheerfully adopt a similar system, to
 prevent a measure which tends to al-
 most a total destruction of the wes-
 tern country. This is a subject that
 requires no comment—the injustice of
 the measure is glaring—and as the
 inhabitants of this district wish to
 unite their efforts, to oppose the ces-
 sion of the navigation of the Missis-
 sippi, with those of their brethren residing

on the western waters, we hope to see such an exertion made, upon this important occasion, as may convince congress that the inhabitants of the western country are united in the opposition, and consider themselves entitled to all the privileges of freemen, and those blessings procured by the revolution; and will not tamely submit to an act of oppression, which would tend to a deprivation of our just rights and privileges.

We are, gentlemen, with respect,
your most obedient servants,

GEORGE MUTER,
HARRY INNES,
J. BROWN,
BENJ. SEBASTION.



*Letter from captain John Sullivan,
late of the continental army, to the
Spanish minister at New York.*

*State of Georgia, frontier of the
Creek nation, March 1, 1787.*

May it please your excellency,

HAVING waited thus far in expectation of permission to join the Spanish troops in South America,—and having expressed to your excellency an ardent inclination to obtain the mere honour of serving in any Spanish regiment, as a volunteer,—which requisitions as they were not complied with in due time, I beg leave to decline the acceptance of any rank or degree in the service of his catholic majesty.

The annals of history must have informed your excellency, that many nations have had abundant reason to deplore the impolicy of those whom they had invested with the powers of government, in slighting the proffered services of men (however young like myself) whose bent, study, and inclination naturally led to tactical pursuits, and to war; and who af-

terwards arrived to the highest pinnacle of military eminence and glory, at the woful experience of such countries and states, as had rejected those early overtures of service to their armies. Not to talk of the Achaian league, of the Athenian Spartan, or Theban story, modern history is replete with such proof and your excellency cannot but reflect, (however inapplicable, perhaps the instances may hereafter prove, a young and insignificant soldier of fortune) what France has suffered from a rejected Eugene; and the Saxe, whose services had been refused by an English court, afterwards fertilized the plains of the Netherlands with the blood and carcasses of slaughtered Britons:

But to the point.

Being a soldier of fortune, as I profess—and having studied, from my infancy, the science of arms, practical war is now my pursuit, a profession most congenial with my principles and disposition: and the sands of Americans, officers in the late army, pant for an opportunity to serve this country. The banks of the Ohio and the Mississippi are actually alive with the first American characters of this stamp: and call upon from thence, by my heroic brethren of the army, honour, virtue, and the bias of an ancient intemperance to assist them. From the Natchez to the Kaskaskies—from Pittsburgh to St. Mary's river—they are prepared to pour forth, with the greatest eagerness, fifty thousand veterans in arms, in defence of their commercial rights throughout the navigable rivers of the southern parts of this empire. The grain is actually germinating sown by the pride, avarice, and selfishness of a certain power, which the pure air of liberty working at its root, and the laws of nature, superior to the narrow policy of any

sign court, must finally and very speedily raise into a host of myrmions—the children of Enachim—the sons of the earth—irresistible in this kind, at least by any force that may obstruct their pretensions, or assail them.

The important drama, may it please your excellency, is now approaching—a new drama, in which the tragedians of the west are to appear in the military buskin: and I am invited to act as a character of some consequence among them. Time will shew how decisively my part shall be performed. Of this I am sure, that I shall exhibit, to my utmost, the part of a soldier. A very considerable time must call forth the mighty energy of the Ohio and Mississippi: and incidents and events are gradually teeming into birth, which will shortly open a spacious field for a daring spirit to explore.

May it please your excellency, the states of Georgia, Franklin, and Kentucke, confederated—the counties of Bourbon, &c. on the Natchez—the settlements on Cumberland, Kaskaskies, and the Wabash—and the governments of Pittsburgh, Westmoreland, &c.—abound with the seeds of war. Nor will any obstructions, from New Orleans to the Blaise, impede the overwhelming inundation, preparing to pour down along the waters of the Mississippi, into the bay of Mexico. The torrent will be irresistible; the crop is actually in the ground; the harvest is ready for the hook, and the hook for the harvest; the reaper has introduced his sickle; combustibles are laid into a pile: nay, the very brand is already applied, and the fire only requires to be fanned. The permission of congress will not be solicited on this occasion. In congress, this people are not represented. I am now on my way to the western waters, where people, too long con-

fined to unnatural boundaries, are ready to float with the current of the Mississippi into the sea; and, with irresistible irruption and impetuosity to burst over every artificial barrier and mound, which may obstruct their free passage into the ocean. The Americans are amphibious animals. They cannot be confined to the land alone. Tillage and commerce are their elements. Both, or neither, will they enjoy. Both they will have, or perish.

I have the honour to remain, with the utmost deference, your excellency's most obedient and most humble servant,

JOHN SULLIVAN,
late captain 4th reg.
Amer. Lt. Dragoons.

P. S. In the alternative of peace or war, I shall ever entertain the highest respect for your excellency; and should be happy in the continuance of a candid correspondence.

To his excellency the Spanish minister, at New York.



Letter from the writer of the foregoing, to his excellency Thomas Pinckney, esq. governor of the state of South Carolina.

*State of Georgia, Flint river, frontier of the Spanish dominions,
Dec. 27, 1787.*

May it please your excellency,

I Do myself the honour of addressing your excellency, in pursuance to a communication which has been made to me this day, by a distinguished officer, from the western waters, in as much as that congress have been pleased to dispatch decisive orders to the commander in chief of the continental troops on the Ohio, for the express purpose of

arresting my person—and being assured that similar instructions were transmitted by that hon. body to the executive of South Carolina. My ignorance of any cause from which a mandate of this nature could arise, or on what legal grounds such an extraordinary procedure can possibly be adopted, induces me to solicit, from your excellency, official information of the authenticity of his intelligence. I have too exalted a sense of the wisdom and patriotic principles of most of the federal deputies, to harbour an idea that my late confidential letter to the minister of Spain, should have operated in this instance—from a solid conviction that there exists no statuted or implied coercive power in any of the state executives, much less in congress, legally authorizing them to controul that noble prerogative a citizen of America possesses—the prerogative of unfolding his private political opinions to the world at large, to sovereigns even, and to states, but with far less ceremony to the mere representative of any transatlantic monarch.

Your excellency must be perfectly informed that the constitution of this land confers on every freeman the glorious privilege of addressing kings; and when it is considered that the freemen of all commonwealths are actual kings themselves, I am led to believe that the private sentiments which were imparted in a confidential letter to the minister of Spain, cannot in consonance to any established rule of law, be brought under the charge of majesty offended.

Events of deep importance to this country and Spain, which are now buried in the womb of time, are insensibly progressing from the crude probability of speculation, to the growth and maturity of fact; and the period cannot be very remote,

when the intrepid Tartar of the west the inexpugnable Kentuckian and Frank, will dare to proclaim, that the Natchez shall be restored either by negotiation or arms, and that their right to the free navigation of the Mississippi shall be no longer withheld by an indolent, jealous, and impolitic nation. Had his excellency the minister of Spain for a moment reflected that my unimportant sentiments respecting our invaded rights of navigation, were but the simple echo of the voice of nineteen-twentieths of the people of America, and which had long before been published by many distinguished general officers of the late war, now residing on the western waters, his good sense would have pointed out the impropriety of importuning congress on the trivial subject of a letter so perfectly apologetic and confidential—a letter written to himself, and by his having (probably) first committed it to the press, of exhibiting his intended vengeance in so feeble a form before a bantering and sneering universe. No personal consideration shall ever induce me to withdraw from any investigation which may arise on this subject; on the contrary, I will with cheerfulness, wait the issue of all impeachments of such a nature, conscious that I have not exceeded those limits which the law prescribes: and that freedom of opinion is the inalienable birthright of every citizen or denizen of these states.

If a simple declaration of sentiments on a political question—sentiments unattended with any overt act—sentiments which American citizens daily presume to express to their local sovereigns; can be construed into criminality by any body of men, and by those, in particular, who possess no legislative rights, nor any right, in time of peace, affecting the person of a freeman—such an

assumption of power must strike at the very existence of liberty. I have, therefore, the strongest conviction, that my letter to the minister of Spain consists in reasoning on contingent events, and that, in strictness of law, the smallest restraint, in matters of a speculative nature, must be a gross usurpation of rights established by the late revolution. Your excellency well recollects that not many years have elapsed since the Spanish ambassador at the court of St. James's complained of a newspaper article which was offered to the intellectuals of his royal sovereign. The publication was conformable to general belief; and he was informed, to his satisfaction, by the British court, that the laws of England—laws still prevailing with us—inflicted no punishment on a subject, for singling his native privilege of promulgating opinions. The king of England, as little united to us by treaty as the Spanish monarch, has, since the peace, been personally reviled in our prints, and his nation repeatedly menaced with hostilities, in consequence of the unjust retention of the western posts; and yet he was silent. He is legally abused in his own land. Kings, queens, nations, and courts, are there stricken with impunity. What has deprived a citizen of America of the same privilege? No law yet extant has done it.

I am not aware, however, of any deficiency of respect, either by words or actions, which could have originated on my part, in derogation of the minister of Spain; having always entertained the highest veneration for his person and commission.

I respect him not only as an ambassador, but I admire him as a man. I also reverence myself, as a freeman of this enlightened country; and hold in too high estimation the right to canvass freely and discuss all

measures, in which the people, of whom I am a part, are vitally interested, tamely to suffer it to be infringed, by any power, foreign or domestic. Let a law be once established, by which a citizen of America dare not, with impunity, disclose his political opinions, even in the confidence of a private letter, and no person will observe a line of greater caution or reserve in all my future addresses to dignified substitutes.

Passive obedience shall be my invariable creed.

I will then bow before the image of power, and yield such exterior acquiescence, as the prophet of old recommended to his Syrian convert. I will not even consider that congressional mandate extraordinary, which should ordain an annual pilgrimage to an imported, unprocreative jackass, in order to manifest in person my implicit devotion to the congenial attributes of the royal donor.

On this important occasion, I am happy in having the honour to address a soldier of science and distinction, who is perfectly enabled to determine how far any requisition from any external or internal power should be acquiesced with, on the one hand, when the liberty of the citizen evidently preponderates on the other.

I have the honour to remain,
with profound respect,
your excellency's most obedient,
and most humble servant,

JOHN SULLIVAN.

P. S. Enclose my address to the governor of Georgia.



To the editor of the A. Museum.

SIR,

AS the regulations lately adopted by the court of France, in favour of the commerce of the united

states, will, it is expected, revive the important business of ship-building in this country, you are requested to give the following extracts from a late publication*, a place in your useful museum. They serve to shew how greatly our interest is connected with a spirited attention to this valuable branch of trade.

W. B.

“ THE account of the ships employed in the commerce of Great Britain, at the beginning of the American war, and at this time, [1784], is as follows : the number of ships, or the tonnage, differs very little. At the former period, there were about one million three hundred thousand tons ; at the latter, nearly the same. The ships were built in the following countries :

	Ships.
Northern parts of	
G. Britain,	2419
Southern,	1311
Ireland,	199
British colonies still remaining,	163
American states,	2342
	<hr/>
	6434
Foreign countries,	1260
	<hr/>

being 7694

ships employed in the commerce of Great Britain, at the commencement of the war. Soon after the peace, the numbers were as follow :

	Ships.
Built in the northern	
parts of Great Britain,	2226
Southern,	1088
Ireland,	144
British colonies still remaining,	104
American,	1126
	<hr/>
	4688
Foreign countries,	2892
	<hr/>
	7580

NOTE.

* Considerations, &c. by Richard Champion, esq. a British subject.

“ But as a proportion ought to be allowed of the foreign ships, for prizes, which will replace such of our vessels, as were taken by the enemy, the accounts will nearly be,

British,	5154
Foreign,	2426
	<hr/>
	7580

“ Or, considering the American ships as foreign—

British, and its dependencies,	4028
Foreign,	3552
	<hr/>
	7580

“ America was always able to supply us with ships thirty per cent cheaper than they could be built in Great Britain, even with the disadvantage of having the cordage, sails and stores, exported from hence. *

“ One of the most material branches of the American export trade, is ships built for sale, at prices greatly inferior to those in the cheapest parts of this kingdom. The carpenter's prices for building, in sterling money, by the ton, were as follow : In New England, three pounds ; in the middle states, about four pounds ; in South Carolina, or live-oak, five guineas ; the whole cost of the ships, equipped for sea, seven to ten guineas. They were chiefly from New England, which supplied about three-fifths of the whole number of the American ships employed in Great Britain, and were generally sent to sea at the expence of about

NOTE.

* “ In New England, the ship builders will now contract for building ships, at three pounds sterling per ton, including the joiner's work. In the river Thames, the price is nine pounds per ton, for the carpenter's work only.”

to seven guineas per ton. The most beautiful are those built in Philadelphia, where this art has attained the greatest perfection—equal, perhaps superior, to any other part of the world. Capital ships have so been built at New York, and the Chesapeake; and in South Carolina, of live oak, which is of much longer duration than any other timber whatever. Those, who have asserted, that the shipping of our ports, are equally lasting with the American ships, built of live-oak, have been very much misinformed; the latter being found, by experience, to be much more durable than our best oak.”



Observations on the probable effects of the late arret of the French court, respecting the intercourse with America. From the Gazette d'Agriculture, a periodical work, published in France.

THE arret of the 29th of December last*, while it gives the world a new and convincing proof of the dispositions of government, to strengthen our connexions with the united states of America, and to facilitate a commercial intercourse between the two countries, is evidently calculated to open a new and extensive market to the produce of our allies.

The whole amount of the population of Great Britain, Spain, and Portugal, with whom the united states have hitherto had the greatest intercourse, can hardly be compared to that of France only: so that this kingdom, alone, might double the

resources and industry of those states, if its commerce was well understood by their citizens.

Experience has evinced, that in common years, France hardly produces wheat enough for the consumption of fifteen millions of inhabitants: so that ten millions, at least, must depend upon the importation of that article from foreign countries; an importation the more indispensable, as bread is considered by every Frenchman as the most essential food. Vast quantities of wheat are imported annually from Poland, by the way of Dantzic, and particularly by the industrious Dutchmen. The southern provinces are provided from Sicily and Africa, through Marseilles, which city serves as an universal entrepot for the Mediterranean.

But as every country strives to regain by the labour of men, what the soil seems to refuse: so the provinces, which are in want of provisions, pay a particular attention to manufacture the flour themselves, though they import the wheat. Therefore, an American merchant, who wishes to avail himself of the arret of the 29th of December, would probably find an easier market in France, by importing grain instead of flour. It might be objected, that the great bulk of the cargoes would lower the profits: but, even for this, the arret offers a remedy. Let us suppose that the same capital, instead of employing two cargoes of flour, would employ three vessels loaded with grain. American ships being wanted in France, and entirely duty free, one or two of them might be sold to great advantage; and the third return to America, with a cargo of dry goods, wine, oil, sugar, coffee, &c. The cities of Bourdeaux and Nantz might, in this manner, become the principal entrepots of the produce of the united states, which,

NOTE.

* For this arret, see American Museum, vol. III. p. 369,
Vol. III. No. V.

as it pays no duty, unless it be actually sold, cannot be disadvantageous, even if the market is overstocked. Codfish, oil, naval stores, spermaceti candles, rice, tar, pitch, and turpentine, tobacco, salt beef, (particularly if the Irish mode of curing it was well understood and imitated), pot-ash and pearl-ash—in general, every article of American produce, though very bulky, must increase the profits arising from them, by the sale of the vessel which carried them to France: and, instead of cherishing the uncertain and dangerous contraband trade of the West Indies, it seems, that with a little more moderation, greater and more lasting benefits might be obtained by exporting the West India produce from France. It is for this reason, particularly, that we consider Bourdeaux as the most important entrepot for American produce. We have even every reason to think, that in consequence of a successive intercourse, American wheat would be manufactured there for the West India market. Besides, the extensive commerce of that city is constantly in want of ships: and as the American citizens have now the reputation of building them cheaper, and perhaps of better materials, than any other nation, the profits arising from them would compensate the smaller benefits reaped from their cargoes.

Though these observations may not perfectly agree with the interested views of some of our merchants, whose particular branches of commerce have been injured by the said arrest—and though we have every reason to believe, that our public wealth will be very little increased by our intercourse with the united states—we partake of the wish, which is common to every patriotic Frenchman, that a people, whose independence and elevation to the dignity of a sovereign power have

cost us so much blood and so many millions, may support its station and daily increase its resources: and that the annual expence of the nation, for provisions of all kind naval stores, and other articles, instead of supporting some power whose very existence is indifferent to us, may serve to supply the want of an infant country, which we have always cherished, and where we flatter ourselves to have many friends. If, after all, she rejects the hand of benevolence stretched out to support her—if she does not know how to improve her own fortune—we can only lament her blindness.



Extract from a pamphlet, entitled
*"The true interest of the united
 states considered:"* supposed to be
 written by William Barton, esq.

THE grand desideratum in the commerce of a nation, is, to maintain a favourable balance in its foreign trade; which is evidenced by a general course of low exchange.

Those measures, therefore, which tend to increase the exports, and diminish the imports of a nation, are the essential means of obtaining this end.

For this purpose, the internal commerce of the country must be promoted by increasing its real riches. Agriculture must be extended, population encouraged; the acquisition of raw materials facilitated, and domestic manufactures, especially of the natural productions of the country, established. The commercial prosperity, and consequently the real independence, of the American states, will be accelerated or retarded, according to the progress of these.

Improvements in agriculture will avail but little, unless a demand

kept up for the products of landed states. The demand, for the supply of foreign countries, depending on a combination of various circumstances, must prove extremely fluctuating. For this reason, the more it can be rendered independent of such extraneous causes, the more regular will be the demand. And, therefore, the greater the number of tradesmen, mechanics, artists, and all that description of people who usually inhabit towns, approaches that of the agriculturists, by so much the less will be the interest of the latter be affected by the precarious operations of foreign trade. Also, the fuller the population of the nation is—provided a sufficient proportion of the inhabitants be employed in useful handicraft trades, mechanic arts, and as merchants in conducting the business of alienation—the more beneficial will be the nature of its commerce, considered in a national point of view. In such circumstances, the export-trade of the country will be enlarged, while its importations of foreign manufactures will be lessened in the same rates; and thus the interest of the merchant will be made to coincide with that of his country:

NOTE.

§ "It would be of much importance to the state," says Mr. Anderson, "if country gentlemen, and the legislature at large, would learn to distinguish with precision between those kinds of commerce and manufactures that tend only to enrich the merchant, and those that at the same time tend to enrich the country and augment its internal prosperity; for these are often disjoined; so often, indeed, that those kinds of traffic which are in general most profitable to the merchant, are least beneficial to the country." Observations on national industry.

—Otherwise, however patriotic principles a merchant may possess, he will find them assailed by his private interest. A few individuals in a nation may be actuated by such exalted sentiments of public virtue, as to sacrifice their own interests to the general welfare; but these instances must be rare; and professional men of every description are necessarily, as such, obliged to pursue their immediate advantage.

Until the country becomes pretty fully populated, the price of labour will continue high; and, although this would be no disadvantage to a wealthy country, if cut off from foreign trade, yet it would be a considerable obstruction to the establishment of domestic manufactures; which, we have shewn, are * essential to a flourishing state of agriculture.

In order, therefore, to create a demand for domestic manufactures among us, the introduction of those foreign ones, which interfere with them, must be laid under certain restrictions; and these must be continued, until the competition, occasioned by the disparity of prices, in the foreign and domestic articles of the same kind, shall be destroyed, by a gradual reduction of the price of

NOTE.

* "There are some instances of nations peculiarly situated which have flourished by means of commerce, without agriculture; there are also a very few examples of manufactures flourishing among a people who could have little dependence on the produce of the soil: but there is not among all the records of past ages a single proof of a people who have enjoyed, for any length of time, a spirited agriculture, without the aid of commerce, or manufactures, or both." Anderson's observations on national industry.

labour at home. These restrictions may consist in duties on the imported * commodity, bounties on the domestic manufacture, and, in some cases, both co-operating, with relation to the same article. Sir James Steuart has so well expressed our sentiments on this head, that we will convey them in his words. Treating of the means of instituting manufactures in a state, he says—"The ruling principle which ought to direct a statesman, is to encourage the manufacturing of every branch of natural productions, by extending the home-consumption of them; by excluding all competition of strangers; by permitting the rise of profits, so far as to promote dexterity and emulation in invention and improvement; by relieving the industrious of their work, so often as demand for it falls short. And, until it can be exported to advantage, it may be exported with loss, at the expence of the public. To spare no expence in procuring the ablest masters in every branch of industry, nor any cost in making the first establishments; providing machines, and every other thing necessary or useful to make the undertaking succeed."

The carrying trade of the united states is also an object of great national importance. The country abounds

with naval stores; and ship-building is, or may be, one of our most beneficial employments.

This species of manufacture is of such a magnitude as to demand the attention of governments in a particular manner. The same principle on which those measures are founded which have been mentioned as necessary to promote domestic manufactures, generally, may be applied to the encouragement of this. Sir Josiah Child (in his discourse on trade) declares himself of opinion, that, in relation to trade, shipping, profit, and power, the English navigation-act is one of the best and most politic laws that ever was made in England and without which, that country would not have had one half the number of shipping, or trade, nor have employed half the number of seamen, which it did at the time I wrote. Our policy undoubtedly dictates the propriety of imposing extraordinary duties on dutiable commodities imported from foreign countries into these states, in vessels built abroad or owned by foreigners; especially on articles of mere luxury although some considerations may render particular exemptions and discriminations indispensable and proper. In some instances, certain

NOTE.

* Dr. Price, speaking of the foreign trade of the American states, has this sentiment. "Indeed, I tremble when I think of that rage for trade which is likely to prevail among them. It may do them infinite mischief. All nations are spreading snares for them, and courting to a dangerous intercourse. Their best interest requires them to guard themselves by all proper means; and, particularly, by laying heavy duties on importations." Observations on the American revolution.

NOTES.

§ The act of navigation was passed in the 12th Car. II. A. D. 1660. Sir Josiah Child wrote about eighteen years afterwards.

+ We will not attempt to specify those cases to which the first part of this proposition may be applicable. A combination of circumstances must designate these. But our infant East India trade seems to come under the latter head. It is true, that the importations from the East consist principally in those things, which are usually denominated articles of lux-

nds of merchandise ought, perhaps, to be exonerated from all duties, whether imported in American or foreign bottoms: But in other cases, such exemption might properly be restricted to goods imported in American vessels only.

But a very obvious and important objection arises here: and that is, that every effort, which can be made by individual states, for placing our foreign trade on an advantageous footing for this country, is liable to be frustrated, by other states counteracting them, or not coinciding in similar measures. The want of that uniformity, which is necessary to give efficiency and permanency to the commercial system of a nation, will render, in a great degree, ineffectual, all partial regulations for the advancement of our trade. A power must necessarily be lodged somewhere, for adjusting the commercial, as well as the political interests of the several states in the union, to one general scale; and, according to the principles on which our federal constitution is framed, this power ought to be vested in the supreme head of the union, in order

NOTE.

ry. But, as many of these have, by long habit, acquired among us the character of necessaries, and are therefore constantly imported from Europe, at second hand—policy dictates the expediency of giving every possible encouragement to the American merchant, in carrying on a trade directly to the East-Indies. Thus will the profits on that trade, now enjoyed by strangers, centre with our own citizens; while this new channel of commerce will employ an additional number of American shipping and seamen, and furnish a vent for an article, the natural production of this country, much esteemed in the East.

to establish the commerce of the united states on the solid basis of national system.

In the mean time, the unsettled state of our foreign trade lays us under a double obligation assiduously to promote our † inland commerce and home consumption. The united states occupy a vast extent of fertile country, lying in various climates, yielding the necessaries of life in the utmost abundance, and furnishing a great diversity of commodities, and raw materials for manufacturing.

The commercial intercourse, carried on between the several states, by sea, should be restricted to American vessels: and the communication from one part of the country to another, inland, ought to be rendered as easy and convenient as possible, by improving the roads, opening canals, and removing all obstructions to the navigation of the rivers, where practicable—in order to facilitate and

NOTE.

† By raising large flocks of sheep, sufficient quantities of wool may be supplied for the manufacturing of coarse woollen cloths, stockings, common hats, &c.—Hemp furnishes us with the valuable article of cordage; and flax-seed, which is a considerable export from this country, yields an oil that is applied to various useful purposes: a large supply of coarse and middling lincn cloths may also be drawn from hemp and flax, such as sail-duck, facking, oznabrigs, sheeting, and the like. Virginia and North-Carolina grow cotton of a very good quality, which may be manufactured into various kinds of clothing, &c. Thread and cotton stockings, of an excellent fabric, have long been made among us. The fine hats of this country are much superior to any imported. All manufactures of leather may be carried on to

promote the interior commerce of the united states.

The influence of example, manners, and fashion, may also greatly contribute to our success, in the pursuit of these great objects of national prosperity. Here the real patriot is enabled to testify his love to his country; and this he may evidence in a variety of ways—according to his talents, his opportunity, or his station.

N O T E.

the greatest advantage. Iron (besides excellent castings and the manufacture of steel) may likewise be wrought into all kinds of heavy work, and into nails, and sundry other articles, much to the benefit of the country. Paper is already made here, of an excellent quality, and in large quantities. Glass-houses have heretofore been erected in divers parts of the continent, and good glass has been made at them. Gunpowder, a very important article, has been brought to great perfection here. Pot-ashes are likewise a very suitable manufacture for this country. Besides, several articles of manufacture are produced from wheat, barley, rye, hops, tobacco, &c. The culture of silk might also prove a mine of wealth to the middle and southern states. The cultivation of the vine, madder, rhubarb, and sundry kinds of fruits, would likewise be productive of real emolument to this country.

These, and a multitude of other materials, that are and might be supplied by the united states, would, with proper encouragement, employ great numbers of our citizens in trades and manufactures, from which they would derive profit, and the public a national benefit.

Premiums offered by the society for political inquiries.

THE society for political inquiries, held at Philadelphia, having determined that premiums should be awarded to the authors, whether members or not, of the best essays upon such subjects as the society should propose for investigation, have agreed that the two following subjects be offered for the said premiums, to be adjudged at any time subsequent to the first of January, 1789.

I. What is the best system of taxation, for constituting a revenue to a commercial, agricultural, and manufacturing country?

II. How far may the interposition of government be advantageously directed to the regulation of agriculture, manufactures, and commerce?

The conditions prescribed by the society, are as follow :

1. The essays shall be written either the English, French, or German languages.

2. The candidate shall send an essay, on or before the first of January, 1789, addressed to the president free of postage or other charge and shall distinguish his performance by some motto, device, or signature at his pleasure. He shall also send a sealed letter, containing the said motto, device, or signature, and subscribed with the real name and place of residence of the author.

3. All communications, from candidates for the premiums, shall be referred to a committee of the society who shall select those they may deem the most proper to be laid before the society at large.

4. The society, at a time to be appointed for that purpose, are to adjudge the premiums, after having previously determined, by vote, whether any of the communication

en under consideration, are deserving of the proposed premiums.

5. No member of the society, who a candidate for the premiums then pending, or who hath not previously considered the comparative merits of the several essays, shall give his vote in awarding the said premiums.

6. The letters, containing the names of authors, whose performances shall not be successful, shall be returned before the society, without making the seals.

7. The premiums shall each consist of an oval plate of solid standard gold, of the value of ten guineas: on one side thereof shall be suitably engraved a suitable motto and device; and on the reverse, these words—"The premium awarded by the society for political inquiries, established at Philadelphia, 9th February, 1787, to _____ for his essay on _____"
A. D. 1789."



papers respecting the leases taken by a private company, in the state of New York, from the Oneida Indians.

No. I.

To the honourable the legislature of the state of New York, in senate and assembly convened. The petition, of John Livingston, of the manor of Livingston, and Caleb Benton, of Noblestown, for themselves and their associates, to the number of several hundred citizens:

Humbly sheweth,

THAT your petitioners were some time since informed, that the Indians, on the western frontier of this state, were inclined to dispose of their lands; and that they were actually in treaty for this purpose

with divers persons holding no allegiance or subjection to the government of the state of New York.

That your petitioners, conceiving that this favourable disposition of the Indians might be improved, not only to their immediate advantage, but to the public benefit, associated for the purpose of making an overture to the said Indians, and appointed agents for conducting the business. That your petitioners' agents arriving at a critical period, had the great good fortune to give a turn to the intended negotiation with the said Indians, for their lands, highly favourable to the government of this state; and which cannot fail of securing the jurisdiction, and all the advantages to arise from a populous settlement, without bloodshed or expence.

That in fact your petitioners found that although the said Indians were wholly averse to an actual sale of their lands, yet they were fully determined to grant the same by way of lease; whereupon your petitioners, on the thirtieth day of November last, obtained from the natives a lease for all their unappropriated lands, for which they have paid a large sum of money, and stand engaged to pay a perpetual annual rent.

That your petitioners are not conscious of having transgressed the law, in taking the said lease; on the other hand, they are fully persuaded, that they have been the instruments of procuring the most solid advantages to their country by the said negotiation, if it shall be happily improved. That your petitioners are informed that it has been confidently suggested that the said lease was obtained from the said Indians, in conjunction with, and under the influence of, British subjects from Canada. That your petitioners take this opportunity, peremptorily to deny the said

suggestion, as utterly false and groundless.

Your petitioners therefore humbly submit the premises to the wise consideration of the legislature, and as in duty bound shall ever pray.

No. II.

To the honourable the legislature of the state of New York, in senate and assembly convened. The petition of John Livingston and Caleb Benton, in behalf of themselves and their associates, &c.

Respectfully sheweth,

THAT whereas the honourable the legislature have been pleased to appoint a committee to enquire into the subject of your petitioners' late petition relative to the leases by them obtained of the six nations of Indians, of their unappropriated lands within this state; and whereas the said committee have reported a state of facts respecting the said leases:

We, your petitioners, do therefore most humbly pray the honourable the legislature to take the said report into their wise consideration, and be pleased to appoint agents, in behalf of the state, to confer with your petitioners, on such terms and considerations as may be consistent with the justice, dignity, and policy of the state; and that the legislature will be pleased to recognize the said leases under such restrictions, as to them, in their wisdom, shall appear just and equitable.

And your petitioners as in duty bound, shall ever pray.

[N. B. The above petition was rejected.]

No. III.

By his excellency George Clinton, governor of the state of New York, general and commander in chief of all the militia, and admiral of the navy of the same.

A PROCLAMATION

(L. S.) **W**HEREAS the senate and assembly of the state, by their concurrent resolution bearing date the sixteenth and twentieth days of February last, after citing "That whereas John Livingston, esq. of the manor of Livingston, hath produced to committees the senate and assembly, two certain writings, and which writings have been reported to the senate and assembly, the one of them dated the 13th day of November last, purporting to be a lease from the chiefs sachems of the six nations of Indians to him the said John Livingston, and others his associates, for the term nine hundred and ninety-nine years on a yearly rent reserved of two thousand Spanish milled dollars, all that tract of land in the said writing described, as beginning a place commonly known by the name of Canada creek, about seven miles west of Fort Stanwix, near Fort Schuyler, thence north-easterly to the line of the province of Quebec; thence along the said line to the Pennsylvania line; then east on the said line or Pennsylvania line, to the line of property, so called by this state of New York; then along the said line of property Canada creek aforesaid. The other the said writings, dated the 8th day of January last, purporting to be a lease from the sachems, chiefs and warriors of the Oneida nation of Indians, to the said John Livingston and his said associates, for the term of nine hundred and ninety

ine years, on a rent reserved for the first year of twelve hundred dollars, and increasing at the rate of one hundred dollars per annum, until it shall amount to fifteen hundred dollars, of all those lands in the said writing described, as the tract of land commonly called and known by the territory of the Oneida Indians, with an exception as to several tracts and parcels in the said writings particularly specified; and which said leases were obtained from the said Indians, by the said John Livingston and his associates, not under the authority, nor with the consent of the legislature of this state," did resolve, as the sense of the said senate and assembly, "that the said leases are purchases of lands, and therefore that by the constitution of this state, the said leases are not binding on the said Indians, and are not valid; and did thereby also further resolve, as the determination of the legislature, "that the force of the state shall, from time to time, as occasion may require, be exerted to prevent intrusions on, and for preserving to the people of this state, their rights to the lands and territories comprehended within the boundaries specified in the said leases, against the said John Livingston and his said associates, and all other persons claiming or to claim any right, title, or benefit under the said leases or either of them."

Now, therefore, agreeably to the request of the senate and assembly, also expressed in their said concurrent resolutions, I have issued this my proclamation, hereby strictly charging and requiring the said John Livingston and his said associates, and all other persons, that they do not settle, improve, enter, or otherwise intrude on such of the said lands, as have not heretofore been granted in due form of law, as they

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shall answer for every intrusion at their peril.

Given under my hand and the privy seal, at Poughkeepsie, this first day of March, in the twelfth year of the independence of the said state, A. D. 1788.

GEO. CLINTON.

No. IV.

Talk of the Oneida Indians, lately received by the legislature of New York.

BROTHERS, chiefs, and great men, who sit round the council fire of our brethren, the people of the state of New York, attend.

Brothers, we have come thus far on our way to see you, at your council fire: but the roads are already become very bad; and the prospect of their soon being worse, induces us to return, and to speak to you in writing.

Brothers, we are your allies: we are a free people: our chiefs have directed us to speak to you, as such: therefore, open your ears, and hear our words.

Brothers, in your late wars with the people on the other side of the great water, and at a period when thick darkness overspread this country, your brothers, the Oneidas, stepped forth; and, uninvited, took up the hatchet in your defence. We fought by your side. Our blood flowed together: and the bones of our warriors mingled with yours. You appeared grateful for our attachment: and gave us repeated assurances, that, should the great Spirit give you success, we should be made to rejoice. The event of the war was favourable. We returned to our country, where ruin and desolation had overspread our fields and villages.

ges. We rejoiced, however, that we could return in peace; and pleased ourselves with the hopes of the peaceable and quiet enjoyment of our country, for which we had fought and bled in the common cause, together with you. While we were thus flattering ourselves with the agreeable prospects, we received an invitation to meet some of your chiefs, who were sent to speak with us at Fort Herkmer. We were glad, and immediately set out to meet them, expecting they were come to relieve our wants, and to make good the repeated assurances we had received, that, on our return to our country, we should be made to rejoice. Those chiefs, who then met us, will doubtless remember, how much we were disappointed, when they told us, they were only sent to buy our lands.

Brothers, it is needless for us to recapitulate the speeches that were made on that occasion. You cannot forget them: you have probably wrote them in a book. Your chiefs may well remember, how reluctantly we entered on a treaty for the sale of our lands. They may also remember the method we then took to evade it, which was, by making a proposal to them, to lease a certain part of our country. The contempt, with which they received our offer, is, doubtless, still fresh in their memory: it is in ours. In compliance, however, with their urgent solicitations, we at length consented to sell them a part of our lands, in consequence of the solemn and repeated assurances your chief sachem then made, that this should be the last application, that our brothers, the legislature of New York, would ever make to us for land.

Brothers, we are determined, then, never to sell any more. The experience of all the Indian nations to

the east and south of us, has fully convinced us, that if we follow the example, we shall soon share the fate. We wish that our children and grand-children may derive a comfortable living from the lands which the great Spirit has given us and our forefathers. We therefore determine to lease them. Our friends in different parts of the country, hearing of our determination, and being willing that we should still continue a nation, have offered to take our land by lease, and give us a generous rent. We were loth to affront you again with the offer of our lands on such terms; and have therefore agreed to the proposals of our friends. Brothers, since we have been on the road, a lying bird has passed by us and reached your council-fire, and told you that we have not leased our lands. We say, brothers, the suggestion is false: and we hope you will treat it as such.

Brothers, we are surprised to hear you are displeased, because others have accepted that, which your chiefs have told us was beneath your nation. But, brothers, we are more surprised still, to learn, you claim a right to controul us in the disposal of our lands. You acknowledge it to be our own, as much as the game we take in hunting. Why then do you say that we shall not dispose of it, as we think best? You may, brothers, with as much propriety, when one of our hunters comes to your market with a pack of beaver, point out the person to whom he shall sell, and to no other.

Brothers, we wish you to consider this matter well, and to do us justice. We have now leased our whole country, excepting what we reserved for our own use, to people, who, we doubt not, will pay us according to agreement: and if there be any thing that you can do, to encourage

em in their settlement of it, we wish it may be done.

Brothers, this is all we have to y.

To the great men of the state of New York.

Jacob Reed, Sec.

his

Peter X Salekarengbis,

mark.

his

Daniel X Segameghseriser,

mark.

his

Hendrick X Sabonwate,

mark.

Witness,

eter H. Ten Broeck,

orge Stimson, jun.

Personally appeared before me, the above-named subscribers, and acknowledged the foregoing instrument to be their voluntary act and deed.

Acknowledged before me, this twelfth day of March, 1788,

HENRY J. V. RENSSELLAER, one of the judges of the inferior court of the county of Columbia.

•••••

Mr. Carey.

SIR,

THE history of our common swallows, has long been a problem in ornithology. Whilst people in general supposed them birds of passage, a few, who appear to be better informed, supported the contrary. The opinion of the many was founded on what they thought probable; that of the few, on facts.

Having been told by my nurse, that swallows wintered in the moon-land, and, after I grew older, that they were birds of passage, I was a sceptic to the doctrine of their descending to pass the winter in water. I

now begin as much to doubt the theory of those naturalists, who contend they are birds of passage, as I doubt the philosophy taught by my nurse.

In the year 1780, I was conversing with a zoographer, who lived about twenty miles from Boston, on the phenomenon of the sudden exit, but gradual and irregular return of swallows. I observed to him, that geese and other sea-fowl, which, in the spring of the year, visited the northern lakes, and in the fall returned, were observed both in their flight from, and return to, the sea; that blackbirds in the fall were seen in numerous flocks, directing their course to the south-west; that as we never saw a collection of swallows appearing to be on their passage to another country, I thought it probable, that when they began their passage, they flew only in the night, or ascended beyond the reach of the human eye.

The gentleman replied, they were not birds of passage; that the cause of their sudden disappearance, but irregular return, was, they had a fixed day for immersing into the water, but none for emerging from it. On my doubting his hypothesis, he told me, that as a neighbour of his, not long before, was draining a pond, on a warm day, near the season of the year in which swallows first appear—his attention was attracted by observing the mud, which, in consequence of draining the pond, had for some time been exposed to the sun, move, and appear animated. He then ordered a quantity of this mud to be conveyed to a room in his house, which he caused to be gradually warmed by a slow fire. From this mud, there soon arose a number of swallows, hovering over himself and family, who had been spectators of their resurrection.

In the year 1782, I lived near the

mill-pond, which covers a marsh on the north-side of the town of Bolton. About the middle of August, this pond was covered with swallows; some flying just above the surface of the water, others lighting on the rushes and water-lillies, which raised their heads above it. On enquiring of one of my neighbours, whose house stood adjoining the pond, in which he had lived for a number of years, the cause of such an unusual collection of swallows to that water, he said it was no more than what happened every year at that season. For some days before they take their annual flight, continued he, they rendezvous at this pond. He then mentioned the day of the month, [August] which I have forgotten, on which they would disappear; which took place accordingly.

To gain the particular attention of those who may find it convenient to investigate a following hypothesis, was the cause of mentioning the foregoing circumstances so minutely.

Last August, from the tenth till past the twentieth, I was at Bethlehem, in Pennsylvania. About the fourteenth, as I was one afternoon walking in the gardens, between the Lehi and Manors creek, I observed the air over the creek to be almost darkened with swallows. This excited my curiosity, and attracted my attention. On the north side of the creek, nearly opposite the sisters' garden, grew a number of willows, between which and the garden was a small marsh. Upon the boughs of these willows, about sun-set, the swallows alighted in such numbers, as to appear like bees, to hang to, or sit upon one another. I enquired the cause of their leaving their secure nests, formed in buildings in which they had passed the summer—and acting, as I thought, contrary to their native instinct, by roosting in the open air—and was informed

by the rev. mr. Van Vleck of the town, that during the number years he had resided there, for a few days before the swallows disappeared they never failed collecting in vast numbers, as he supposed, to pass the night in the branches of those willows which hung over the water. For a few evenings, I constantly walked to the creek, to observe the motions, during which time the numbers appeared to increase; till a sudden they were not—but on the day had all disappeared. Their cause was not, I believe, three days from the twentieth of August.

As there could not be a more convenient or agreeable situation, for watching the exit of those birds than the one at Bethlehem, I will say what has been said on the subject may induce some of the inhabitants or of the strangers who generally visit that town in the month of August, fully to investigate this phenomenon. If they immerge into the water, to the belief of which I am almost a convert, I imagine the descent is between the fifteenth and twentieth of the month. Were any person to form a booth under the willows, sufficient to secrete him from the swallows, by watching them for a few evenings, or perhaps nights, I have no doubt but he would be able to make a full discovery.

That they are properly amphibious, I believe no one will contend. If they do lie, during the winter in a torpid state, under water, where they should, whilst in the full enjoyment of life and vigour, and in the warmest month in the year, plunge into an element, in which they cannot exist, but in a state of insensibility, will afford a subject of speculation for the curious and truly philosophic.

JOSIAH BLAKELEY,
Baltimore, Jan. 7, 1788.

Population of the united states.

THE numbers of inhabitants in the different states, according to the most accurate accounts which could be obtained by the late federal convention, were as follow :

In New Hampshire,	102,000
In Massachusetts,	360,000
In Rhode-Island,	58,000
In Connecticut,	202,000
In New York,	238,000
In New Jersey,	138,000
In Pennsylvania,	360,000
In Delaware,	37,000
In Maryland,	218,000
(including three-fifths of 80,000 negroes)	
In Virginia,	420,000
(including three-fifths of 280,000 negroes)	
In North Carolina,	200,000
(including three-fifths of 60,000 negroes)	
In South Carolina,	150,000
(including three-fifths of 80,000 negroes)	
In Georgia,	90,000
(including three-fifths of 20,000 negroes)	



Comparative view of the extent of the united states, &c.

FEW people are able to form an adequate idea of the extent of the districts ceded to the united states of America, at the conclusion of the late war : it will not be amiss, therefore, to compare them with countries, with whose situation and extent we are more acquainted. The following measurements are made with accuracy :—

The river Ohio is navigable from Fort Pitt to its mouth, which is 1164 miles. The lands on the banks of the Ohio, and between the Alleghany mountains, the lakes On-

tario and Erie, and the Illinois and Mississippi rivers, contain 233,200 square miles, nearly equal to Great-Britain and France, whose contents are 235,237 square miles.

The lands between the Illinois, lakes Huron and Superior, and the Mississippi, at the falls of St. Anthony, contain 129,030 square miles, nearly equal to Great-Britain and Ireland, which are 131,800 square miles.

The lands from St. Anthony's falls to the south line, from the lake of the woods to the head of the Mississippi, contain 50,000 square miles, which is more than Holland, Flanders and Ireland, which are 57,908 square miles.

The thirteen states of America contain 207,050 square miles, nearly as large as all Germany, Flanders, Holland and Switzerland, which contain 207,483 square miles,



On the danger of introducing epidemical disorders, through want of proper precautions.

IT will, I believe, be readily acknowledged, that it is at all times better to prevent a disease than to be necessitated to cure it, after it exists. This maxim is true in ordinary distempers and accidents ; and it is equally true, and of much greater importance, when it aims at preventing the introduction of a dangerous, spreading, and infectious disease into a healthy, uninfected city.

I have been led into these reflections, from a positive assurance, that an epidemical fever now rages in the town of Basseterre, in the island of St. Christophers, highly contagious, and alarmingly mortal. I have been informed too, that cotton (than which there is not a substance in nature more capable of imbibing, retaining,

and communicating infection) is often imported from that island into this city. It must therefore be of the most dangerous consequence to have a quantity of this article, after having been exposed to an air thus infected, and then packed close into large sacks, which exalts the poison it has absorbed, transported to this or any other healthy city, and on its arrival, unpacked, unfolded, and distributed far and wide, in small parcels among the inhabitants.

I have known frequent instances of the baneful effects of foreign distempers, thus imported in both the cities of Philadelphia and New York; and have heard from the ancient inhabitants of this city, that so long ago as the year 1702, a malignant fever, little inferior to a plague, was imported into this place, and from its extreme mortality, distinguished by the name of the great sickness. This formidable disease, if tradition says true, was brought here from St. Thomas's in a single bale of cotton.

That fatal distemper called the yellow fever, or black vomit, which, about forty years ago, produced its ravages in several parts of the continent, particularly in the cities of Philadelphia and New York, was first imported from the Spanish main into Barbadoes, and, from that island, in the course of commerce, communicated to this continent.

The cities of New York and Philadelphia have several times experienced the fatal effects of those dangerous infections; some of them resembling the jail fever, from dirty ships, crowded with as dirty passengers, from Rotterdam! which, from this cause, took the name of the Palentine fever. The severe effects of which I felt in my own family, when two young gentlemen who then lived with me (one of whom is now justly esteemed among our most respectable inhabitants) were at the same time

seized with this putrid fever, attended with such extreme danger, that their lives were for many days despaired of. At this time, there was no legal provision against these dangers. Vessels with this load of impurity, came immediately up to the wharves: and even the sick were landed in the town: there was no proper place at a distance to receive them: and the common jail, as well as debtors', were then in the heart of the city. Convinced of the impropriety and danger of these things, I represented the same in a memorial to the then governor and council, who paid attention to this representation, and immediately proceeded to remedy the inconvenience it pointed out. At this time the new jail was built. The corporation purchased Bedlow's island with a house upon it, which, though too small, was sufficient to shelter and receive the unhappy sufferers from the pestilential air of a foul and sickly ship, into one of the most vivifying and salubrious airs in the world; and an opportunity given to cleanse and purify these vessels at a safe distance from the town.

The legislature at the same time passed a law every way competent to these salutary purposes. This law is certainly very necessary, as well as vigilance, judgment, and fidelity, in those who are appointed to execute its injunctions.

Among the evils attendant upon these unwelcome visitors, there was one of a pernicious tendency, distinguished only by physicians of sagacity and skill. The natural endemical diseases of this wholesome northern climate, were, before their appearance, simple and regular. They returned as the seasons returned, to which they respectively belonged. Their history and symptoms were distinctly marked, and the method of cure generally well ascertained.

The influence of these imported

demics, so far changed the nature of these others, as to render them more complicated, dangerous, and more severe, resembling in many particulars, those symptoms, which distinguished the original prevailing epidemic—and this effect upon these incurrent diseases of the country, is observable two, and sometimes three years after the period of these distempers, which apparently pass through their course in about six months.

From the consideration of these facts in our own country, and the abundant confirmation of them in others—from motives of professional duty, and the sense I have of their importance—and from very long experience and attentive observation of these things—I have been induced humbly to offer my thoughts on this occasion. I should feel myself hurt by the idea of exciting any unnecessary fears. The facts above related are notorious; they have all of them, except the first, fallen under my immediate attention and notice.

The same causes which produced this, should they at any time occur, would too probably produce the same effects. My intention, therefore, is not to awaken such just apprehensions as may guard, as well as human vigilance can guard my fellow citizens, from an event of such fatal consequence.

It may not be unnecessary to observe, that a substance like cotton, if once charged with contagious matter, ought never to be attempted to be destroyed by fire, which, before it consumes the cotton, will diffuse the offensive particles in the air, without preventing their effects. Destroying it merely by sinking it in salt water, or at least letting it remain a considerable time immersed in its current, I think would be the most safe and effectual method of preventing danger.

The extreme subtlety and activity of this kind of poisons, are evident from a common experiment. The skin pricked with a fine cambric needle, armed with the smallest particle of small pox matter, is capable of effecting so great a change in the human frame, as to produce that loathsome and dangerous disease. It is true, that human art, under the benevolent smiles of providence, has greatly lessened its force and danger, and in most instances, rendered it mild and safe in its operation. Human sagacity, too, under the same gracious protection, is the only probable means of preventing the importation of dangerous and infectious distempers, to which commercial cities, from their constant correspondence with foreign countries, may sometimes be exposed.

J O H N B A R D.

New York, April, 1788.



Advantages of the use of oxen, in draft, &c.

MANY people complain of the shameful diminution in our exports of corn and flour, not reflecting that the immense number of useless horses, which it is now the fashion for almost every farmer and citizen to support, does not a little contribute to this artificial scarcity. Formerly it was the custom, in several of these states, to plough and harrow the lands, as well as convey their produce to market, by means of oxen. That frugal mode of land carriage is at this time almost wholly discontinued, and such is the force of custom and prejudice, that I know many persons who would sooner carry their articles to market on their own shoulders, than be seen driving an ox team. When I was a boy, my father conveyed his whole family to

church on Sundays in a waggon drawn by two large oxen. I, his successor, would willingly pursue the same mode, and have more than once signified my intentions to my wife, who, however, absolutely and sullenly refuses to attend me, if thus conveyed; and indeed I find my whole family are in combination with her against me. What one horse devours annually, would plentifully support at least four labouring oxen; judge then what must be the loss sustained to the community by such a superabundance of these animals. The whole country is mounted on horseback, as if bound out (Quixote-like) upon schemes of knight errantry, and to engage in tilts, tournaments, and perilous adventures. For a person of but middling consequence to be seen travelling a journey on foot, is enough to disgrace him for ever, in the opinion of the genteel part of our county: and a young fellow in my neighbourhood, who some time ago paid his addresses to a village lady, at a few miles distance from his father's house, is at present under sentence of discharge from the girl's relations for no other reason in the world but making use of his legs to carry him to visit the object of his affections.

A COUNTRYMAN.



To the honourable the senate, and house of representatives, of the commonwealth, of Massachusetts, in general court assembled; the petition of Daniel Shays and Eli Parsons.

May it please your honours,

YOUR petitioners, penetrated by the melancholy sense of their late errors, and anxious once more to return to the bosom of their country, and enjoy again the blessings of peace, under the mild operation of the

laws—humbly beg leave to supplicate the mercy of the legislature in their favour.

If the most unfeigned penitence confirmed by an experience of the misfortunes to which they have been personally exposed, in the course of their unhappy opposition to government, may be allowed to operate they certainly have this to plead in expiation of their past conduct.

Your petitioners do not mean to multiply assurances: but they beg leave boldly to refer to their future behaviour, as the best evidence of their sincerity: and they firmly trust that no person will hereafter exceed them, in the practice of such virtues as are characteristic of the best citizens.

They have indeed been deluded; but they beg the hon. court to believe that their hearts are still warmed with every sentiment of respect, reverence, and attachment to the rights and liberties of the people, and to the laws and constitution of the government.

Your petitioners, may it please your honours, do not presume to offer any thing in their justification fully sensible, as they now are (though they may wish to extenuate) that no arguments can be adduced to excuse their conduct; they see, they feel, and they freely acknowledge, the have long felt the effects of their own temerity. They have unfortunately adopted a mode of procedure, which they are fully sensible, cannot be justified: they will never cease to remember with regret, their not having trusted for relief to the wisdom and integrity of the ruling power.

But when they thus freely acknowledge their errors, they pray the hon. legislature to believe, that these have proceeded from a misapprehension of facts—from a failure of judgment and from a too precipitate resentment; but by no means from a

abandoned principle. They have been obliged to seek an asylum, far from their friends and connexions, in a state of exile from their country. Yet whatever may have been suggested to the contrary, they have never combined with the concealed enemies of America, if such there be, to subvert its liberty, and to destroy its independence. No! may it please your honours, however criminal they may have been in other respects, they cannot be justly reproached with this enormity.

If it be thought necessary, that an example of their sufferings should be continued, to prevent similar disorders to those they have so rashly occasioned in this commonwealth; your petitioners would hope, that this end is already attained, as they conceive, in the estimate of their distresses, there is scarcely an inconvenience or misfortune to which they have not already been exposed: But if these circumstances do not plead in their favour, they pray the hon. court would remember, that they have friends, wives, and children, who are innocent, but who, with your petitioners, will be ever bound by new ties of gratitude and affection, to the government, by their pardon.

Your petitioners, may it please your honours, in thus asking to be restored to the rights and liberties they have lost, and to the peace and protection of the commonwealth, are not influenced by the fear of further punishment; but in their reinstatement in the possession of such invaluable blessings, they wish to have an opportunity of proving to the world, the sincerity of their reformation, and of adding another happy instance to those which have been already so conspicuous from the clemency of this hon. court.

DANIEL SHAYS,
ELI PARSONS.

His excellency gov. Sullivan's message to the general court of New Hampshire, at their session in December, 1787.

SOME important dispatches, which came to hand since the close of the last session, having rendered it necessary to call the general court together at an earlier day than that to which it stood adjourned—I have, by advice and order of council, directed your attendance at the place where, by your appointment, you were to hold the winter session; and, although it is much earlier than you proposed to meet, I can see no reason why all the business necessary to be transacted, may not as well be completed now, as at any other period.

Among the public papers which I have the honour to lay before you, the report of the national convention, respecting a plan of government for the people of the united states, with the resolve of congress accompanying the same, will undoubtedly claim your attention.

The important question, whether the proposed form shall be received or rejected, can no farther come under your consideration, at this time, than as it stands connected with, or may be affected by, your determination respecting the propriety of appointing delegates to decide upon it.

The proposed plan undoubtedly has its defects. The wisdom of man has never yet been able to furnish the world with a perfect system of government: perhaps that which claims the attention of America is liable to as few exceptions as any which has hitherto been produced.

I have carefully considered the plan, and endeavoured to weigh the objections which have been raised against it; and have not, as yet, been able to discover any of more weight than might be urged against the most perfect system which has ever been

offered to mankind; or, perhaps, might be alleged against any which human wisdom may ever contrive.

The requisition of congress, of the eleventh of October last, for supplies, to enable that body to comply with public contracts, will merit your attention. The new proportion, and the act for settling the estates of intestates, which were postponed the last session, are not unworthy of your notice at this time. The necessary grants for support of our own government, will claim a share in your deliberations.

Should you think proper to consider and determine upon the matters before mentioned, I know of nothing of sufficient importance to demand another meeting of the general court before the next election. Should congress find that the proposed constitution is agreed to by a sufficient number of states, and call upon this state to furnish members to attend the first meeting under it, your attendance may again become necessary; otherwise, the expence and trouble of another session may be avoided.

Permit me, gentlemen, to recommend to you, unanimity and dispatch; and to assure you, that I shall most cheerfully join you in every measure for promoting the public interest.

Given at the council chamber in Portsmouth, the 5th day of December, 1787, and in the 12th year of American independence.

JOHN SULLIVAN.

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Speech of his excellency George Clinton, esq. governor, &c. of the state of New York, to both houses of the legislature, convened at Poughkeepsie, Jan. 11, 1788.

Gentlemen of the senate and assembly,

IT being essential to the welfare of our confederacy, that the repre-

sentation in the national council, should be maintained without intermission—and as the term, for which the delegates from this state were elected, is expired—you will perceive the necessity of proceeding to an immediate new appointment.

Gentlemen, the requisition for the federal services of the current year, also claims your early attention. I have full confidence, that the same spirit, which has invariably influenced the legislature of this state, will induce you to a cheerful and effectual compliance with every measure founded on the national compact, and necessary to the honour and prosperity of the union.

It will appear from the act of congress, and other papers on the subject, that the supplies, required for the common treasury, are principally to arise from the arréars due on former requisitions. Advantages will, therefore, result from the punctuality of past payments: as a greater proportion of the resources of the state may now be applied to the relief of our own citizens. To assist you in making the necessary arrangements, I shall cause to be laid before you estimates of the public debts, with the receipts and expenditures, since the conclusion of the war, abstracted from the treasurer's annually-audited accounts, by which you will be particularly informed of the present state of our treasury.

It gives me great pleasure to inform you, that the jurisdiction-line between the commonwealth of Massachusetts and this state, which has been so long a subject of controversy, and attended with much inconvenience and distress to the borderers, is at length finally adjusted; and that the boundary line between this state and the commonwealth of Pennsylvania, is also completed. The reports of the commissioners, employed in these respective transactions, accom-

panied with maps of the lines, will be delivered to you, in order that the proper directions may be given for their authentication and deposit, and for the final liquidation and settlement of the expences which have attended these services.

I shall leave with you the several official communications, which have been made to me in the recess : with these, you will receive the proceedings of the general convention lately held in the city of Philadelphia, and an act of the united states in congress, for their transmission to the legislatures of the different states. From the nature of my office, you will easily perceive, it would be improper for me to have any other agency in this business, than that of laying the papers respecting it, before you for your information.

Gentlemen, it must afford the highest satisfaction to observe, that under the blessing of heaven, tranquility and good order continue to prevail throughout the state ; and that by the industry of the citizens, the country is in a great measure recovered from the wastes and injuries of war. The profuse use, however, of luxuries brought from abroad, drains us of our wealth, and is the source from which most of our present difficulties proceed. I would, therefore, submit to the wisdom of the legislature, the propriety of limiting the consumption of foreign articles, by encouraging the manufacture of our own productions, as far as may be consistent with our situation, and a due regard to beneficial commerce.

GEORGE CLINTON.

Answer of the senate.

SIR,

FULLY impressed with the necessity of maintaining a constant representation in the national coun-

cil, the legislature proceeded, at an early day, to the appointment of a delegation for the present year.

Sensible of the obligation of a strict adherence to the national compact in all its parts, the requisition for the federal services of the current year, will claim our earliest attention. It affords us real satisfaction to learn, that from the arrangements of the national finances, this state will experience those benefits, which it had reason to expect, from its exertions on former occasions. This satisfaction is increased by the reflection that it will afford the legislature an opportunity of applying a considerable portion of the resources of the state, to the diminution of its own debt.

We contemplate with real pleasure the advantages which must necessarily result from a final adjustment of the jurisdiction-lines between this state and the commonwealths of Massachusetts and Pennsylvania.— Measures have already been adopted for the authentication and deposit of the reports and proceedings of the commissioners who have been engaged in that important transaction : and provision will be made for liquidating and discharging the expences which have accrued in those services.

The several official communications, which your excellency has been pleased to lay before us, will claim the attention due to their importance.

The tranquility and good order, which pervade this state, are a blessing for which our most grateful acknowledgments are due to heaven. To this blessing, we may, in a great measure, attribute that spirit of industry, so prevalent in our fellow citizens ; and which, we assure your excellency, our best endeavours will be exerted to continue and extend, by discountenancing every superfluous consumption of foreign

commodities, so detrimental to the true interest of the state.

By order of the senate,

Pierre Van Cortlandt, president,
Senate chamber, Jan. 26th, 1788.



A message from the president and the supreme executive council of the commonwealth of Pennsylvania, to the general assembly.—Feb. 21, 1788.

Gentlemen,

WE sincerely congratulate your honourable house on the ratification of the federal constitution by the convention of this state, since your last recess: and we flatter ourselves that its adoption will be attended with important good consequences to all the states in the union.

In compliance with your resolution of the 13th of November last, we have obtained, and now lay before the general assembly, descriptions of the lands lying between the northern boundary of this state and Lake Eri, with an estimate of the sums which will probably be necessary for the purchases of the same, as will appear by the papers marked no. 1 and 2, to which we beg leave to refer. We have likewise wrote to our delegates in congress relative to the estimate—their answer, as soon as it comes to hand, will be transmitted to your house.

A revenue law of this state, passed the 25th day of September, 1783, requiring merchants who re-ship goods from Philadelphia to produce within one year certificates of the goods being actually landed at the port of destination, appears to bear hard on the trade of this port:—we therefore recommend a revival of the aforesaid revenue act, when the merchants will have an opportunity of laying the particular inconveniences before your house.

The officers of the land-office do not consider themselves authorised by the present laws to grant re-locating warrants, in cases where warrants on which the purchase-money has been paid, are deprived of land by prior grants:—we are of opinion, that this power ought to be given; as the time may come, when vacant lands will not remain for them, and in that case the owners may call on the state for compensation.

The granting of land in the late purchase, has nearly ceased, and we are apprehensive that this fund will continue unproductive, until the terms of the new purchase are lowered—a measure which we therefore recommend.

Great mistakes have been committed by the orphans' courts of the different counties of this state, respecting pensions; particularly in providing for the support of the widows and orphans of militia-men who fell in the late war: this power, in the opinion of council, ought to be lodged in more proper hands, and its decisions thereby rendered more uniform.

The continual depreciation of our paper money merits the most serious attention of your honourable house. This circumstance, alone, diffuses languor and embarrassment through the whole executive department of government—contracts cannot be completed for the making of roads, or any other public business, without either risking the honour of government, or acting on an implied depreciation of money; situations equally irksome and ineligible. We cannot help suggesting the propriety of more speedily destroying as much of it as is in the power of the treasury.

The time limited by law, for completing titles for lands, held under office-rights, obtained before the 10th day of December, 1776, expires on the 10th day of April next—we are

f opinion that the extension of that period is necessary.

The benefits expected from the penal law, having not equalled the benevolent wishes of its friends and framers, we recommend such alterations to be made in it, as shall be calculated to render punishment a means of reformation, and the labour of criminals of profit to the state. Late experiments in Europe have demonstrated that those advantages are only to be obtained by temperance and solitude of labour.

The act entitled, "an act appointing wardens for the port of Philadelphia, &c." passed the 26th day of February, 1773, having by experience been found useful, and being on the point of expiring, we recommend an immediate renewal of the same for a further term, with such improvements as may occur to you.

We again recommend to the notice of your honourable house the resolution of congress, passed March 21, 1787, and beg leave to suggest the propriety of passing a declaratory act, to answer the end intended by the said resolution.

The latest accounts from the county of Luzerne, communicated to us by col. Pickering, represent the settlement as being in perfect quietness at present, and that the laws of this state have their free operation.

We have now the pleasure of laying before you a map of the northern boundary of this state, as run by the commissioners appointed for that purpose, who have completed that useful work. We also herewith communicate a letter from his excellency Samuel Huntington, esq. governor of the state of Connecticut, in consequence of which we have mitigated the severity of John Franklin's confinement as much as circumstances would warrant.

B. FRANKLIN.

Speech of his excellency John Hancock, to the legislature of Massachusetts, Feb. 27, 1788.

Gentlemen of the senate, and gentlemen of the house of representatives,

THE letters which I have received in the recess, the secretary will lay before you: they are not of such importance, as to claim any particular notice from me at this time.

The adjournment of the general court, for the space of one week, became necessary, in order to give the members, who were also members of the late convention, an opportunity of returning home before the meeting of the legislature. I could have wished that the proclamation of adjournment had been of an earlier date; but the session of the convention, by the importance of the business before that body, was protracted beyond what was expected. I flatter myself that this will be satisfactory, as well to those of you, gentlemen, who, having not heard of the adjournment, have been some days waiting in town, as to those who may be apprehensive that the business of the present session will demand a longer time, than can be conveniently afforded at this season of the year.

I have nothing of more importance at this time to recommend to your deliberation, than the lands of the commonwealth. It is scarcely necessary to remark, that this state, from its particular situation, as well as from the noble ardour of its citizens in defence of their liberties and independence, hath accumulated a very heavy debt: the interest of which arises to ninety thousand pounds annually. This consideration alone, gentlemen, should induce us, by every possible exertion, consistent with the peace of the com-

monwealth, to diminish the principal. In order to this, the great quantities of unappropriated territory, both in the eastern part of the government, as well as the immense tract lately ceded to us by the state of New York, afford ample resources, if wisely and expeditiously improved by that spirit of unanimity and discernment which I flatter myself will always distinguish your conduct, when the interest of the people is so deeply and essentially engaged in the result of your deliberations.

I am sorry that my duty urges me to mention to you the necessity of a small tax : but the treasury is so far exhausted, that the business of the government must cease its progress unless a tax is granted

Since the last session, Luke Day, one of those persons for whose arrest a bounty was offered in consequence of an act of the legislature, has been taken by some of the citizens of New Hampshire, to whom one hundred pounds has been paid, upon their delivering him into the custody of the sheriff of the county of Suffolk. Could the late unhappy commotions be thrown into oblivion, consistently with the honour of government and the safety of the people, I persuade myself it would give satisfaction.

In the beginning of your last session, I laid before you the constitution and frame of government for the united states of America, agreed upon by the late general convention, and transmitted to me by congress. As the system was to be submitted to the people, and to be decided upon by their delegates in convention, I forbore to make any remarks upon it. The convention which you appointed to deliberate upon that important subject, have concluded their session, after having adopted and ratified the proposed plan, according to their resolution, a copy whereof, I

have directed the secretary to lay before you.

The obvious imbecility of the confederation of the united states, has too long given pain to our friend and pleasure to our enemies. By the forming a new system of government, for so numerous a people of very different views and habit spread upon such a vast extent of territory, containing such a great variety of soils, and under such extremes of climate, was a task, which nothing less than the dreadful apprehension of losing our national existence could have compelled the people to undertake.

We can be known to the world only under the appellation of that of the united states; if we are robbed of the idea of our union, we immediately become separate nations, independent of each other, and not less liable to the depredations of foreign powers, than to wars and bloody contentions among ourselves. To pretend to exist as a nation without possessing those powers of coercion, which are necessarily incident to the national character, would prove a fatal solecism in politics. The objects of the proposed constitution, are defence against external enemies, and the promotion of tranquillity and happiness among the states. Whether it is well calculated for those important purposes, has been the subject of extensive and learned discussion in the convention which you appointed. I believe there was never a body of men assembled, with greater purity of intention, or with higher zeal for the public interest. And although when the momentous question was decided, there was a greater division than some expected, yet there appeared a candour, and a spirit of conciliation, in the minority, which did them great honour, and afforded a happy preface of unanimity amongst the

ple at large. Though so many the members of the late convention could not feel themselves convinced that they ought to vote for the ratification of this system, yet their opposition was conducted with candour and manly firmness, and with such marks of integrity and regard to the public interest, as to merit them the highest honour, and gives no reason to suppose that the peace and good order of the government is not their object.

The amendments proposed by the convention, are intended to obtain constitutional security of the principles to which they refer themselves, and must meet the wishes of all the people. I feel myself assured that they will very early become a part of the constitution: and when they shall be added to the proposed plan, shall consider it the most perfect form of government, as to the object it embraces, that has been known amongst mankind.

Gentlemen, as that Being, in whose hands is the government of all nations of the earth, and who put down one, and raiseth up another, according to his sovereign pleasure, has given to the people of these states, a rich and an extensive country—has, in a marvellous manner, given them a name and a standing among the nations of the world—blessed them with external peace, and internal tranquility—I hope and trust that the gratitude of their hearts may be expressed by a proper use of those inestimable blessings—the greatest exertions of patriotism—by forming and supporting institutions for cultivating the human mind, and for the greatest progress of the arts and sciences—by establishing laws for the support of society, religion, and morality, as well as for punishing vice and wickedness—and by exhibiting, on the theatre of the world, those so-

cial, public, and private virtues, which give more dignity to a people, possessing their own sovereignty, than crowns and diadems afford to sovereign princes.

Every matter of a public nature, which may occur, worthy of your notice, shall be communicated by message: and in every concern, tending to promote the public welfare, I shall be happy to concur with you, and be ready at all times to give every possible dispatch to the business that may come before you.

JOHN HANCOCK.

Council chamber, Feb. 27, 1788.



Speech of his excellency gov. Huntington to the legislature of Connecticut, May 1788.

Gentlemen of the council, mr. Speaker, and gentlemen of the house of representatives,

THE annual business of the May session, will at this time, of course, claim your attention.

It will be remembered, that the assembly, at their last session, were pleased to invest the governor with the necessary powers, in their recess, to furnish this state's quota of officers and troops, to be stationed on the western frontiers, agreeably to the act of congress of the third of October last. That business has been completed, so far as the duty devolved upon me: and the proceedings will now be laid before you. The recruiting service is now going on: and it is probable there will be no difficulty in obtaining the complement of men.

The law of this state, made in pursuance of the act of congress, which makes provision for officers, soldiers, and seamen, disabled in the service of their country, in the late war, appears to be inadequate to

answer the design. While other states, and their citizens, are taking the full benefit of that provision, there are a number of meritorious officers and privates in this state, who, though suffering under their wounds, and equally deserving, can obtain no relief. Let me recommend to the assembly to make the necessary provision in this case.

The support of public faith is an object ever to be kept in view. Without it, no government can be long reputable—no people happy.

You will doubtless find it indispensable in the course of the present session, to make adequate provision for the support of civil government the current year.

There are several regulations of congress, which will also merit your consideration.

As we continue to enjoy the blessing of peace and internal quiet, and (with great satisfaction let me add,) industry seems generally to pervade the state, will it not be wise for this assembly to devote a part of the session, in consulting such measures as shall in the best manner aid and cultivate the arts of peace, promote agriculture, and such manufactures as ought to be encouraged, and may be carried on with profit to the undertakers, when the business is well understood?

It seems that a voluntary company in this city and its vicinity, are attempting to set up the woollen manufactory, in a manner so extensive as to reap the advantage of a proper division of labour, in the various branches of that business: will not it be proper for the assembly at this time to give some encouragement, in such manner as they shall judge most expedient, to promote and establish a business of so much importance as the woollen manufacture in this state? Our flocks of sheep are rapidly increasing, owing in some measure to

the encouragement the legislature have given for raising sheep, although other causes have no doubt co-operated in producing the effect: the principal raw materials for this manufacture may, with proper encouragement, abound in this state.

The promoting of education is a matter of great importance: more especially that degree of education which ought to be universally inculcated upon children and youth of ranks and conditions of life. If consider the subject, not only as respects the happiness of individuals in this and a future life, but also effect it must have with regard to public weal, it will appear of greatest importance: a happy constitution and government never be enjoyed or maintained, by an illiterate or savage people.

The danger of neglecting means of education lies more in secure parts and parishes, than in populous cities and towns in this state.

Although government have been compelled, by necessity, to withhold for a time the aid and encouragement which was formerly given for support of schools, is it not now come expedient for the legislature again to lend their fostering hand some way to encourage the necessary instruction of the succeeding generation?

There are other matters of importance which will doubtless claim consideration, and which your wisdom and prudence will bring under view in the course of the session.



Form of the ratification of the federal constitution by the Maryland convention.

Convention of the delegates of the people of the state of Maryland, April, 1788:

WE, the delegates of the people of the state of Maryland

ing fully considered the constitution of the united states of America, reported to congress, by the convention of deputies from the united states of America, held in Philadelphia, on the 17th September, 1787, of which the foregoing is a copy, * and submitted to us by a resolution of the general assembly of Maryland, at a November session, 1787, do, for ourselves, and in the name and on the behalf of the people of this state, assent to and ratify the said constitution. In witness whereof we have hereunto subscribed our names.

The yeas and nays being taken, on the question to agree to the above ratification, were as follow :

Affirmative. The honourable the president; messrs. Barnes, Chilton, Sewal, W. Tilghman, Yates, Perkins, Granger, Wilkinson, Grahame, Chesley, Smith, Brown, Parnham, Turner, Stone, Goldsborough, Lloyd, Stevens, G. Gale, Waggaman, Stewart, John Gale, Hammond, Sullivan, Shaw, Gilpin, Hollingsworth, Sileron, Evans, Bowie, O. Sprigg, Hall, Digges, Carrol, Hanson, J. Tilghman, Seney, Holliday, Hemfry, Chaille, J. Martin, Morris, Stone, Johnson, Love, Potts, Fawcetta, J. Richardson, Wm. Richardson, Driver, Edmonson, McHenry, Coulter, T. Sprigg, Stull, Rawlings, Bryock, Cramphin, Thomas, Deacons, Edwards. 63

Negative. Messrs. J. T. Chase, J. Chase, Mercer, Harrison, Ridgely, Ridgely of William, Cockey, Cromwell, Love, Pinckney, L. Martin, 11

N O T E.

* A copy of the constitution, was annexed to the ratification.

*A speech, delivered by a minister to his people, in the town of * * * * *, in the state of Massachusetts, on the 4th of January, 1787, previous to reading the address of the general court, of that state, at a lecture held for that purpose.*

My fathers and brethren,

YOU are not ignorant of the occasion for which we are now assembled. I have orders to communicate to you an address from the supreme authority of this commonwealth. They have appealed to you in common with the rest of the community. They have laid before you their proceedings, and the motives of their conduct. As your civil fathers, they certainly deserve from you attention and respect: as a power arising from your free and unbiased election, they have a claim to your obedience. Many of them, you well know, in private life, to be men of unquestioned integrity. Their representation of the state of your affairs deserves great notice: and if you shut your eyes or senses against plain evidence, you are guilty of a high degree of madness and vice. Rude and unquiet spirits are constantly exasperating your passions against the conduct of your rulers. They are evidently endeavouring to enkindle the flames of war around you, and exposing this state, lately peaceable and happy, to all the horrors of confusion and carnage. Will you give a candid and gracious hearing to such pestilent, seditious men, who excite you to fury and arms, when you know some of them to be infamous in private life, and at the same time treat the solemn appeal of your delegated sovereignty with coolness and contempt? You may possibly think that I am out of the line of my office, in pronouncing my sentiments upon this subject, more especially, since, by the courtesy of

the laws, men of my profession are exempted from public taxes. To excuse myself for this attempt, I would acquaint you that the government have expressly requested the influence of our order, with their connexions, for the support of society, at this dark day. I have been also desired, by some respectable individuals in the parish, to exert myself for the same purpose. I feel animated to deliver my opinion freely, when I see the faces of so many friends, whose generosity and kindness hath exceeded both my wishes and merits. From those who have expressed such a disposition in all other instances, I have reason to expect in this, patience and candour, though their apprehensions of the merits of the question be different from my own.

What I shall principally observe to you, at this time, may be comprehended in two parts. In the first, I shall make some remarks on the necessity of government—the different effect of those which are free, and those which are tyrannical—and the conduct of former nations under the latter: and then I shall come more immediately to our own country, and the commotions which prevail in it. These divisions, however, will not hinder me from intermingling such transient reflections, in each of them, as may tend to illustrate and confirm both.

I trust, I need not be particular in proving to you the necessity of government and subordination among mankind. It is demonstrated, not only from the wants and vices of man, but from every part of the universe which is visible. Look up to the heavens over your head. Observe the sun, moon, and stars; the two former, how apparently superior to the latter, as to light and greatness! and, among the lesser luminaries, the same gradation is continued; since not only the discovery of

natural philosophy, but even the naked eye, discerns that one star differeth from another in glory. Look around the earth, in which we dwell observe the difference between the oak upon the mountain and the plant of a day's growth—between the lion of the forest and the insect which crawls beneath your feet. Reflect upon the different powers and faculties of the human mind, from the most brilliant accomplished genius to the next idiot you meet—and then you must be persuaded, that heaven hath convinced you, by these striking testimonies, of the necessity of subordination among men—that to attempt to rebel against so plain a principle would not only be violating the positive laws of society, but making an attack upon nature herself. But if reason be unavailing to enforce the belief of so clear a truth—yet our feelings will confirm it. We see in the best ordered communities, where there are the wisest laws, that crime is terrible to nature, and to the peace and existence of individuals, are committed. What should we expect from the passions of men in a state of licentiousness and anarchy, when the restraints are taken away? When wickedness is unrestrained by fear of punishment, and is attended by the passions of avarice, lust, and revenge, how horrid the condition of the weak and peaceable! It is those checks, and those alone, which keep your lives and property from being assaulted by the robber in the street—and enable you to sleep quietly on your beds, without dreading the midnight assassin. Thus the necessity of government is not only confirmed to you by the voice and works of providence, but is found, by the testimony of your own experience, as necessary for man as the element wherein he breathes.

Government is various as to its forms and exercise. In most nations

single man is invested with the absolute disposal of the lives and fortunes of the people. Supposing that man, perfectly wise and perfectly good, were intrusted with this power, it would, without doubt, be the best: for all measures would be planned with wisdom, and executed with vigour. But, considering the imperfection of the nature of man, his trust is too great and important for an individual. History hath abundantly certified it, by exhibiting to us so many monsters in human form, who have sacrificed mankind to their ambition, avarice, and cruelty. The evils of despotic government are as great as those of anarchy: and they, who fly from a mild government to a monarchy, will soon find the terrible consequences of the latter. It would be well for such of our fellow citizens, as are enlisting under the banners of desperate wretches, to think first on the consequences of absolute power, before they contribute to establish it in the hands of some of the vilest and weakest of the human species.

To remedy the evils of despotic power, some of the wisest nations have established free governments. Their salutary influence hath been known and witnessed by the brightest pages of human history. Renown, for wisdom, for virtue, for arms, and for opulence, hath marked the character of those regions, where national liberty hath been enjoyed, and where a proper share of power and honour is proportioned to the several ranks in the community. But even these nations have not been without commotions similar to our own: the effect of them was the loss of their freedom. At Athens, some artful demagogue procured a law for the abolition of debts, and the equal division of property. The former was carried into execution: the latter never was. The common people

soon found they were the tools of designing men: they remained equally unhappy and indigent. The same people were inveigled, by deceiving traitors, to banish their best and wisest men—to neglect providing for war—to break private contracts—to quarrel and be factious among themselves. Philip of Macedon took the advantage of their condition, and conquered their country.

When Catiline designed to burn the city of Rome, and murder all ranks of people indiscriminately, he professed himself to be the patron of the poor: and many there were, who wished him success, whom he intended to have involved in ruin and death; so apt and easy are the multitude to be deceived, and so loth are they to hear the truth. Cæsar succeeded in tyranny over the same nation, by acting a very similar part; he affected to free Rome from the tyranny of the senate: and in the end, both senate and people were slaves.

These are, my friends, solemn and affecting examples. Their history, like the tombs of the dead, affords both warning and terror. The freedom and dignity of a nation are acquired by blood and danger. It is easy to sacrifice these advantages in the moments of suspicion and caprice.

The citizens of America engaged in the revolution, from a thorough conviction, that their rights and privileges were invaded. Some pledged their estates, some their service, and others their lives. The two former of these would have reason to class us with the most infamous of mankind, if we attempt to cheat them out of their property: and yet the payment of public contracts is held up as one of the grievances of the day: and we are threatened, because this is not done, not merely with the destruction of our form of go-

vernment, but with a dissolution of the union. And the malcontents have openly boasted, that they can have assistance from Britain, if too weak of themselves to accomplish their design. But be not deceived. Vengeance will overtake us, if we attempt to break public faith or private engagements. France, Spain, and Holland would league against a country so much their debtor. The domestic creditors of the commonwealth would unite in defeating so impious a design : and every honest man in the community would either draw his sword, or open his purse, to defeat so much villainy and fraud. These consequences are as certain as they are near. There is, therefore, no time to trifle. Every man ought to know the effects of his conduct, before he begins. These commotions will very soon bring on a civil war in the land, and with it all the evils which affect humanity. Every fierce and ungovernable passion, which disturbs the human breast, will be displayed. Cruelty, rapine, and carnage will mark its footsteps. Poverty and tyranny will close the train. In fact, as the Roman orator justly observed, from the fatal experience of it in his own country—"In civil wars, every calamity is felt. Conquest itself is to be dreaded, though it should fall to the right cause : for if the better side are disposed to be mild and gentle by nature, they are forced to be cruel by necessity, for their establishment and preservation." May heaven preserve us from proving the justice of these observations in our own country ! Therefore, before we are so rash, as to oppose a government constituted by the people, we ought solemnly to consider the effects of such an attempt. There are always citizens whom pride, idleness, or despair, prompts to hazardous undertakings. If the sober part of the

community join with and support these incendiaries, the latter must be equally answerable, for the blood that is spilled, and for the ruin brought on their country, before the tribunal of Omnipotence.

But over whom do these armed multitudes wish to gain a victory Over a foreign enemy ? Over a scetred tyrant, who hath invaded the rights, and slaughtered their brethren ? Over the barbarians of the wilderness ? None of these are the objects of their opposition. With whom, then, are they waging war. With venerable, grey-headed citizens, who are entrusted with the execution of the laws—with the majesty of the laws—with the tribunal of justice—with the form and essence of our constitution—with the peace and property of every virtuous man in the state. Their victory will be followed with the ruin and tear of the widow and orphan—with the stagnation of commerce—in fine with every curse that can befall a free and opulent nation. Happy are they who are already numbered with the dead, and are not living witnesses of the disgrace and destruction of their country.

Charity obliges me to think favourably of the common people, who have been concerned in these insurrections : but however honest and good their motives may be, they are a very dangerous set of men : for admitting that grievances in government are existing, have they use the proper means to redress them. Are they men of information and experience ? Are they not prejudiced even to rancour, against all who have the administration of public affairs ? How many disorders are committed, by young men, in the hour of mirth and recreation, when their spirits are raised by company and wine ? How many more disorders then, may we expect from men who

are drunk with passion, instigated to arms by false reports, and under the direction of leaders of dissolute, abandoned morals, and desperate circumstances—men who, so far from wishing to undeceive them, will take pleasure in inflaming their resentment—under leaders who have no hopes, or prospects, but from the destruction of the commonwealth?

There is not a man, in his cool moments, but will pronounce such a recourse to arms, in a government like ours, as unnecessary as dangerous.

Hath not the meanest citizen a right in all important elections? Are not our governor, senate, and representatives annually chosen? Cannot we cause them to return to private life, if they have acted weakly or wickedly? What constitution can be more liberal and equal? When the people delegate their authority, those, to whom that trust is committed, must have both influence and power, or else the design of their appointment is defeated—and they who elect, lose the advantages of society, by reverting to a state of anarchy and nature. But the present authority hath by no means been negligent, either of the wishes of the people, or the good of the commonwealth. In their last session, they passed an act for the relief of debtors, making real and personal property a tender for debts. Several laws have been enacted, respecting writs and references, which have nearly annihilated the inferior courts. They have lowered the fees of civil officers, at least a quarter part—and we have no doubt that other supposed grievances would have been redressed, had not the dignity of government been insulted with armed rioters—and riotous men supposed they had a right to demand, by force, what they neglected to apply for in a peaceable manner.

Our grievances, I am persuaded,

by no means originate from our present authority, or the domestic charges of government: for they spring from other causes, notorious to every sensible man in the community. We have lived in luxury since the peace. The memory of paper money hath rendered property precarious, and prevented the opulent from engaging in such modes of business as would increase their property, and find employment for the poor. Let us endeavour to remedy these defects by wise and good laws, which shall secure to every man his property. Let us introduce œconomy, not only into the administration of government, but into our own houses. Let the debtor be open and fair, and, as far as possible, punctual to his engagements. Let the creditor avoid needless law suits, nor drive the lower orders of society to despair. In one word,—if we endeavour to fill up the duties we owe to government and ourselves, in the best manner we are able to do, I am persuaded our affairs will assume a new countenance. We should be more respected abroad, and happier at home. We have a large and extensive country. We have advantages both for foreign commerce and internal manufactures. The reason why we at present suffer, is because these benefits are not improved. Let our laws be wise and salutary, and let us wait patiently until they can have time to operate, and no doubt we shall see an alteration in the state of our country.

Let me therefore, my friends, once more renew my request to you—that you would examine into the facts, which, from the mouth of our supreme authority, I shall now pronounce in your hearing. Let me conjure you, by all that is sacred and dear to you, not to harbour prejudices against the government which you have yourselves pronounced law-

ful. Excuse me, if I am the more earnest on this point, when you know my reasons. For these six months past, infamous and vile men have made it their employment to propagate notorious falsehoods, respecting the first names and officers in this commonwealth. They have succeeded too well for your peace and tranquility. From this source, we may trace out no small degree of that suspicion and jealousy, which hath soured many (otherwise well-disposed) persons, not only towards men, but even the laws themselves.

Public slander, like private, is odious to all sober, considerate men. The effects of the former are much more mischievous than the latter, as the quiet and felicity of a nation are more to be regarded than those of a single person. Public calumny was the cause why Socrates was murdered with the forms of law. It was the same principle, which instigated the mobs of Athens and of Rome to banish their best citizens, and commit the administration of their affairs to men of the blackest minds and most depraved manners.

While I am addressing you upon the subject of public calumny, and warning you of the fatal consequences of it, I would beg your attention while I refute a popular error imbibed by many at this day, and which is received by the inexperienced part of the community as a truth, i. e. that men in place and power are in league with the opulent part of the community, to trample upon the rights of the poor, and engross the wealth of the country in the hands of a few. With respect to men in public offices, the short time of their continuance in trust, and their dependence on the people at large for re-election, must appear a sufficient confutation of the charge. Nor doth the accusation against men of property appear to be better sup-

ported. If a tyrannical form of government is introduced, will not their immediate posterity be sufferers with others? Indeed, there are so few of us raised beyond moderate circumstances, and our form of government is so popular, that we have very little to fear, at this day, from men of property.

I have thus far, with great freedom, offered my sentiments upon our affairs. Notwithstanding our present embarrassments, we have the means of felicity in our hands. We have a free government—and time, industry and moderation will effectually lighten our present burdens. But if we go on in dissipation and prodigality—in riot and tumult—melancholy experience will soon demonstrate, that tyranny and licentiousness are nearly allied:—we shall lay a foundation for very serious reflection—which will terminate, not in reformation, but despair,



Resolutions entered into by the house of burgeses of Virginia, relative to the stamp-act, on the 29th of May, 1765.

WHEREAS the honourable house of commons in England, have of late drawn into question, how far the general assembly of this colony hath power to enact laws for laying taxes and imposing duties, payable by the people of this his majesty's most ancient colony; for settling and ascertaining the same to all future times, the house of burgeses of this present general assembly have come to the several following resolutions:

Resolved, that the first adventurers and settlers of this his majesty's colony and dominion of Virginia, brought with them, and transmitted to their posterity, and all other his majesty's subjects since inhabiting in this his

majesty's colony, all the privileges and immunities that have at any time been held, enjoyed, and possessed by the people of Great Britain.

Resolved, that by the two royal charters granted by king James the first, the colonists aforesaid are declared entitled to all privileges of faithful, liege, and natural born subjects, to all intents and purposes, as if they had been abiding and born within the realm of England.

Resolved, that his majesty's liege people of this his most ancient colony, have enjoyed the right of being thus governed by their own assembly, in the article of taxes and internal police, and that the same have never been forfeited, or any other way yielded up, but have been constantly recognized by the king and people of Great Britain.

Resolved, therefore, that the general assembly of this colony, together with his majesty or his substitute, have, in their representative capacity, the only exclusive right and power to lay taxes and impositions upon the inhabitants of this colony; and that every attempt to vest such a power in any person or persons whatsoever, other than the general assembly aforesaid, is illegal, unconstitutional, and unjust, and has a manifest tendency to destroy British, as well as American freedom.

The following resolves were drawn up by the committee, but not passed.

Resolved, that his majesty's liege people, the inhabitants of this colony, are not bound to yield obedience to any law or ordinance whatsoever, designed to impose any taxation whatsoever upon them, other than the laws and ordinances of the general assembly aforesaid.

Resolved, that any person who shall, by speaking or writing, maintain that any person or persons, other than the general assembly of this co-

lony, have any right or power to impose or lay any taxation whatsoever on the people here, shall be deemed an enemy to this his majesty's colony.



Resolutions agreed to by the house of assembly of the province of Pennsylvania, relative to the stamp-act, September 21, 1765.

THE house taking into consideration, that an act of parliament has lately passed in England, for imposing certain stamp-duties, and other duties on his majesty's subjects in America, whereby they conceive some of their most essential and valuable rights as British subjects, to be deeply affected, think it a duty they owe to themselves, and their posterity, to come to the following resolutions, viz.

Resolved, *nem. con.* that the assemblies of this province have, from time to time, whenever requisitions have been made by his majesty, for carrying on military operations for the defence of America, most cheerfully and liberally contributed their full proportion of men and money for those services.

Resolved, *nem. con.* that whenever his majesty's service shall, for the future, require the aids of the inhabitants of this province, and they shall be called upon for that purpose, in a constitutional way, it will be their indispensable duty most cheerfully and liberally to grant to his majesty their proportion of men and money, for the defence, security, and other public services of the British American colonies.

Resolved, *nem. con.* that the inhabitants of this province are entitled to all the rights and privileges of his majesty's subjects in Great Britain, or elsewhere; and that the constitu-

tion of government in this province is founded on the natural rights of mankind, and the noble principles of English liberty, and therefore is, or ought to be, perfectly free.

Resolved, *nem. con.* that it is the inherent birth-right and indubitable privilege of every British subject, to be taxed only by his own consent, or that of his legal representatives, in conjunction with his majesty, or his substitutes.

Resolved, *nem. con.* that the only legal representatives of the inhabitants of this province, are the persons they annually elect to serve as members of assembly.

Resolved, therefore, *nem. con.* that the taxation of the people of this province, by any other persons whatsoever, than such their representatives in assembly, is unconstitutional, and subversive of their most natural rights.

Resolved, *nem. con.* that the laying taxes upon the inhabitants of this province in any other manner, being manifestly subversive of public liberty, must, of necessary consequence, be utterly destructive of public happiness.

Resolved, *nem. con.* that the vesting an authority in the courts of admiralty to decide in suits relating to the stamp duties, and other matters, foreign to their proper jurisdiction, is highly dangerous to the liberties of his majesty's American subjects, contrary to magna charta, the great charter and fountain of English liberty, and destructive of one of their most darling and acknowledged rights, that of trials by juries.

Resolved, *nem. con.* that it is the opinion of this house, that the restraints imposed by several acts of parliament on the trade of this province, at a time when the people labour under an enormous load of debt, must of necessity be attended with the most fatal consequences, not only to

this province, but to the trade of our mother country.

Resolved, *nem. con.* that this house think it their duty thus firmly to assert, with modesty and decency, their inherent rights, that their posterity may learn and know, that it was no with their consent and acquiescence that any taxes should be levied on them by any persons but their own representatives; and are desirous that these their resolves should remain on their minutes, as a testimony of the zeal and ardent desire of the present house of assembly to preserve their inestimable rights, which, as Englishmen, they have possessed ever since this province was settled, and to transmit them to their latest posterity."



Address of the house of delegates of Maryland, to the governor of said province.

To his excellency Horatio Sharpe, esq. governor and commander in chief in and over the province of Maryland: the humble address of the house of delegates.

May it please your excellency,

WE, his majesty's most dutiful and loyal subjects, the delegates of the freemen of the province of Maryland, in assembly convened, return your excellency our thanks for your speech at the opening of this session; and beg leave to assure you, that the opportunity your excellency has now afforded us, of promoting the true interest of our country, is extremely agreeable to us.

As we have thought it our indispensable duty to our constituents, at this time to appoint a committee of some of our members, to join committees from the houses of representatives of the other colonies on the continent, who are to meet in the

ity of New York, on the first Tuesday in October next, in order to join in a general and united dutiful, loyal, and humble representation to his majesty and the British parliament, of the circumstances and condition of the British colonies and plantations; and to implore relief against some acts of parliament, we are informed, have lately passed in England, whereby, it is apprehended, the liberty of the colonies will be greatly abridged, which, with the matters necessarily relative to, and dependent upon it, (wherein we have met with some very unexpected delays), has so wholly engrossed our attention, that we have not yet even settled any of our ordinary rules for proceeding: we cannot doubt but we shall stand excused for being thus late in answering your excellency's speech: and having now very nearly completed that affair, and as the next month will be chiefly taken up in adjourned county courts, by which several of our members must be taken from the business of the house, or great numbers suffer by their suits continuing open at this time, we hope your excellency will, as soon as the present important business is finished, give us a short recess of a few weeks, that those inconveniences may be removed, when we shall be very glad to have an opportunity of proceeding to the dispatch of the interesting matters your excellency has been pleased to recommend to us, and to concur with the other branches of the legislature, in every measure tending to produce the general welfare of our country, which we are much pleased to be assured by your excellency, you also consider as your own.

ROBERT LLOYD, Speaker.

Sept. 21, 1765.

Vol. III. No. V.

The governor's answer.

Gentlemen of the lower house of assembly,

As I perceive by your address, which hath been just presented to me, that you are desirous to have a short recess of a few weeks, I shall comply with your request; but it being probable that the stamped paper destined for this province, in consequence of the act of parliament that was made last session, by the legislature of Great Britain, will arrive here before I shall have an opportunity of advising with you again, and that the master of the vessel who may have charge thereof, will desire me to give orders for its being landed, and lodged in a place of security, especially as the person appointed to distribute the stamps here, has, I understand, left the province, I should be glad to know how you would advise me to act on such an occasion.

Sept. 28. HORATIO SHARPE.



Resolutions agreed to by the lower house of assembly in the province of Maryland, September 28, 1765.

Resolved unanimously, that the first adventurers and settlers of this province of Maryland brought with them, and transmitted to their posterity, and all other his majesty's subjects since inhabiting in this province, all the liberties, privileges, franchises, and immunities, that at any time have been held, enjoyed and possessed, by the people of Great Britain.

Resolved unanimously, that it was granted by magna charta, and other the good laws and statutes of England, and confirmed by the petition and bill of rights, that the subject should not be compelled to contribute to any tax, tallage, aid, or other like

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charge, not set by common consent of parliament.

Resolved unanimously, that by a royal charter, granted by his majesty king Charles I. in the eighth year of his reign, and in the year of our Lord 1632, to Cæcilius, then lord Baltimore, it was, for the encouragement of people to transport themselves and families into this province, among other things covenanted and granted by his said majesty, for himself, his heirs and successors, as followeth:

[Here are recited such parts of their charter as may be seen in the 10th and 20th clauses of the Maryland charter.] After which they proceeded thus:

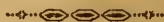
Resolved that it is the unanimous opinion of this house, that the said charter is declaratory of the constitutional rights and privileges of the freemen of this province.

Resolved unanimously, that trial by jury is the grand bulwark of liberty, the undoubted birthright of every Englishman, and consequently of every British subject in America: and that the erecting other jurisdictions for the trial of matters of fact, is unconstitutional, and renders the subject insecure in his liberty and property.

Resolved, that it is the unanimous opinion of this house, that it cannot with any truth or propriety be said, that the freemen of this province of Maryland are represented in the British parliament.

Resolved unanimously, that his majesty's liege people of this ancient province, have always enjoyed the right of being governed by laws, to which they themselves have consented in the article of taxes, and internal policy; and that the same hath never been forfeited, or any other way yielded up; but hath been constantly recognized by the king and people of Great Britain.

Resolved, that it is the unanimous opinion of this house, that the representatives of the freemen of this province, in their legislative capacity together with the other part of the legislature, hath the sole right to lay taxes and impositions on the inhabitants of this province, or their property and effects: and that the laying, imposing, levying, or collecting any tax on or from the inhabitants of Maryland, under colour of any other authority, is unconstitutional and a direct violation of the rights of the freemen of this province.



Queries proposed by the chief justice of the supreme court held at Perth Amboy, to the lawyers of said court September 20, 1765.

WHETHER, if the stamp should arrive, and be placed at the city of Burlington, by or after the first of November, they would as practitioners, agree to purchase them, for the necessary proceeding in the law?

Resolved, by the whole body, *non con.* they would not, but rather suffer their private interest to give way to the public opinion, protesting at the same time against all riotous and indecent behaviour, which they will discountenance by every means in their power, to preserve order, and by an absolute refusal to make use of the stamps, and other quiet methods, endeavour to obtain a repeal of the law.

Second, Whether it was their opinion, that should the act take place the duties could possibly be paid in gold and silver.

Answered by the whole body, it could not be paid in gold and silver even for one year.

Third, Their opinion was desired

whether, as the act required the governor and chief justice to superintend the distributor, he should be obliged to take charge of the distribution of the stamps, by order and appointment of the governor, if he should think proper to fix upon him for that office?

Answered and advised, not to take upon him, the governor not being empowered by the act to appoint; or if he was, it was left to the chief justice's option, and that it would be incompatible with his office as chief justice.

The lawyers also of New-Jersey met, and resolved to lose all their business, rather than make use of any stamps.



Extract from instructions of the inhabitants of the town of Plymouth to Thomas Forster, esq. their representative in the general assembly of Massachusetts's bay. Oct. 21, 1765.

YOU, sir, represent a people who are not only descended from the first settlers of this country, but inhabit the very spot they first possessed. Here was first laid the foundation of the British empire in this part of America, which from a very small beginning, has increased and spread in a manner very surprising, and almost incredible; especially when we consider that all this has been effected without the aid or assistance of any power on earth; that we have defended, protected, and secured ourselves against the invasions and cruelty of savages, and the subtilty and inhumanity of our inveterate and natural enemies the French; and all this without the appropriation of any tax by stamps, or stamp acts laid upon our fellow subjects in any part of the king's dominions, for defraying the expences thereof. This

place, sir, was at first the asylum of liberty, and we hope will ever be preserved sacred to it; though it was then no more than a forlorn wilderness, inhabited only by savage men and beasts. To this place our fathers (whose memories be revered) possessed of the principles of liberty in their purity, disdaining slavery, fled to enjoy those privileges which they had an undoubted right to, but were deprived of by the hands of violence and oppression in their native country. We, sir, their posterity, the freeholders and other inhabitants of this town, legally assembled for that purpose, possessed of the same sentiments, and retaining the same ardour for liberty, think it our indispensable duty, on this occasion, to express to you these our sentiments of the stamp act, and its fatal consequences to this country, and to enjoin upon you, as you regard not only the welfare, but the very being of this people, that you (consistent with our allegiance to the king, and relation to the government of Great Britain) disregarding all proposals for that purpose, exert all your power and influence in relation to the stamp act, at least until we hear the success of our petitions for relief. We likewise, to avoid disgracing the memories of our ancestors, as well as the reproaches of our own consciences, and the curses of posterity, recommend it to you to obtain, if possible, in the honourable house of representatives of this province, a full and explicit assertion of our rights, and to have the same entered on their public records, that all generations yet to come, may be convinced, that we have not only a just sense of our rights and liberties, but that we never (with submission to divine providence) will be slaves to any power on earth; and as we have at all times an abhorrence of tumults and disorders, we think ourselves happy in being at present under no

apprehensions of any, and in having good and wholesome laws sufficient to preserve the peace of the province in all future times, unless provoked by some imprudent measure : so we think it by no means adviseable for you to interest yourself in the protection of stamp papers, or stamp officers.

The only thing we have further to recommend to you at this time, is to observe on all occasions a suitable frugality and œconomy in the public expences ; and that you consent to no unnecessary or unusual grant at this time of distress, when the people are groaning under the burden of heavy taxes : and that you use your endeavours to enquire into, and bear testimony against, any past, and to prevent any future unconstitutional drafts on the public treasury.



The American crisis. No I.

By mr. Thomas Payne.—Published in December, 1776.

THESE are the times that try men's souls. The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of his country : but he that stands it now, deserves the thanks of man and woman. Tyranny, like hell, is not easily conquered : yet we have this consolation with us, that the harder the conflict, the more glorious the triumph. What we obtain too cheap, we esteem too lightly : 'tis dearness only, that gives every thing its value. Heaven knows how to set a proper price upon its goods : and it would be strange, indeed, if so celestial an article as freedom should not be highly rated. Britain, with an army to enforce her tyranny, has declared, that she has a right, not only to tax, but " to bind us in all

cases whatsoever : " and if bound in that manner is not slaver there is not such a thing as slave upon earth. Even the expression impious : for so unlimited a power can belong only to God.

Whether the independence of the continent was declared too soon, delayed too long, I will not now enter into as an argument : my own simple opinion is, that had it been eight months earlier, it would have been much better. We did not make a proper use of last winter ; neither could we, while we were in a dependent situation. However, the fault if it were one, was all our own : we have none to blame but ourselves. But no great deal is lost yet : all that Howe has been doing for this month past, is rather a *saavage* than a conquest, which the spirit of the Jersey a year ago, would have quickly repulsed, and which time and a little resolution will soon recover.

I have as little superstition in me as any man living : but my secret opinion has ever been, and still is, that God will not give up a people to military destruction, or leave them unsupportedly to perish, who have so earnestly and so repeatedly sought to avoid the calamities of war, by every decent method which wisdom could invent. Neither have I so much of the infidel in me, as to suppose that he has relinquished the government of the world, and given us up to the care of devils : and as I do not, I cannot see on what ground

NOTE.

* The present winter is worth an age, if rightly employed : but if lost, or neglected, the whole continent will partake of the evil : and there is no punishment that mankind does not deserve, be he who, or what, or where he will, that may be the means of sacrificing a season so precious and useful.

the king can look up to heaven for help against us. A common murderer, a highwayman, or a house-breaker, has as good a pretence as he.

'Tis surprising to see how rapidly a panic will sometimes run through a country. All nations and ages have been subject to them. Britain has trembled like an ague, at the report of a French fleet of flat-bottomed boats: and in the fourteenth century, the whole English army, after ravaging the kingdom of France, was driven back, like men petrified with fear: and this brave exploit was performed by a few broken forces, collected and headed by a woman, Joan of Arc. Would that heaven might inspire some Jersey maid to spirit up her countrymen, and save her fair fellow sufferers from ravage and ravishment! Yet panics, in some cases, have their uses: they produce as much good as hurt. Their duration is always short: the mind soon grows through them, and acquires a firmer habit than before. But their peculiar advantage is, that they are the touchstones of sincerity and hypocrisy, and bring things and men to light, which might otherwise have lain for ever undiscovered. In fact, they have the same effect upon secret traitors, which an imaginary apparition would upon a private murderer. They sift out the private thoughts of man, and hold them up in public to the world. Many a disguised tory has lately shewn his head, that shall penitentially solemnize with curses the day on which Howe arrived upon the Delaware.

As I was with the troops at Fort Lee, and marched with them to the edge of Pennsylvania, I am well acquainted with many circumstances, which those, who lived at a distance, know little or nothing of. Our situation there was exceedingly cramped, the place being on a narrow neck of land, between the North river and

the Hackinsack. Our force was inconsiderable, being not one-fourth so great as Howe could bring against us. We had no army at hand, to have relieved the garrison, had we shut ourselves up, and stood on the defence. Our ammunition, light artillery, and the best part of our stores, had been removed, upon the apprehension that Howe would endeavour to penetrate the Jerseys, in which case Fort Lee could have been of no use to us: for it must occur to every thinking man, whether in the army or not, that these kind of field-forts are only fit for temporary purposes, and last in use no longer than the enemy directs his force against the particular object which such forts were raised to defend. Such was our situation and condition at Fort Lee, on the morning of the twentieth of November, when an officer arrived with information, that the enemy, with two hundred boats, had landed about seven or eight miles above. Major-general Greene, who commanded the garrison, immediately ordered them under arms, and sent express to his excellency general Washington, at the town of Hackinsack, distant, by way of the ferry, six miles. Our first object was to secure the bridge over the Hackinsack, which lay up the river, between the enemy and us, about six miles from us, and three from them. General Washington arrived in about three quarters of an hour, and marched at the head of the troops to the bridge, which place I expected we should have a brush for: however, they did not choose to dispute it with us: and the greatest part of our troops went over the bridge, the rest over the ferry, except some which passed at a mill, on a small creek, between the bridge and the ferry, and made their way through some marshy grounds, up to the town of Hackinsack, and there

passed the river. We brought off as much baggage as the waggons could contain : the rest was lost. The simple object was to bring off the garrison, and to march them on till they could be strengthened by the Jersey or Pennsylvania militia, so as to be enabled to make a stand. We staid four days at Newark, collected in our out-posts, with some of the Jersey militia, and marched out twice to meet the enemy, on information of their being advancing, though our numbers were greatly inferior to theirs. General Howe, in my opinion, committed a great error in generalship, in not throwing a body of forces off from Staten Island through Amboy, by which means he might have seized all our stores at Brunswick, and intercepted our march into Pennsylvania. But if we believe the power of hell to be limited, we must likewise believe that their agents are under some providential controul.

I shall not now attempt to give all the particulars of our retreat to the Delaware. Suffice it for the present to say, that both officers and men, though greatly harrassed and fatigued, frequently without rest, covering, or provision, the inevitable consequences of a long retreat, bore it with a manly and a martial spirit. All their wishes were one ; which was, that the country would turn out, and help them to drive the enemy back. Voltaire has remarked, that king William never appeared to full advantage, but in difficulties and in action. The same remark may be made on general Washington, for the character fits him. There is a natural firmness in some minds, which cannot be unlocked by trifles ; but which, when unlocked, discovers a cabinet of fortitude : and I reckon it among those kind of public blessings which we do not immediately see, that God hath blessed him with unin-

terrupted health, and given him a mind that can even flourish upon care.

I shall conclude this paper with some miscellaneous remarks on the state of our affairs ; and shall begin with asking the following question : why is it that the enemy hath left the New England provinces, and made these middle ones the seat of war ? The answer is easy : New-England is not infested with tories, and we are. I have been tender in raising the cry against these men, and used numberless arguments to shew them their danger : but it will not do to sacrifice a world to either their folly or their baseness. The period is now arrived, in which either they or we must change our sentiments, or one or both must fall. And what is a tory ? good God ! what is he ? I should not be afraid to go with an hundred whigs against a thousand tories, were they to attempt to get into arms. Every tory is a coward ; for a servile, slavish, self-interested fear is the foundation of toryism ; and a man under such influence, though he may be cruel, never can be brave.

But before the line of irrecoverable separation may be drawn between us, let us reason the matter together : your conduct is an invitation to the enemy ; yet not one in a thousand of you has heart enough to join him. Howe is as much deceived by you, as the American cause is injured by you. He expects you will all take up arms, and flock to his standard with muskets on your shoulders. Your opinions are of no use to him, unless you support him personally ; for it is soldiers, and not tories, that he wants.

I once felt all that kind of anger, which a man ought to feel, against the mean principles that are held by the tories. A noted one, who kept a tavern at Amboy, was standing at his door, with as pretty a child in his hand, about eight or nine years old,

as most I ever saw ; and after speaking his mind as freely as he thought was prudent, finished with this unfatherly expression, " well, give me peace in my day." Not a man lives on the continent, but fully believes that separation must some time or other finally take place, and a generous parent would have said, " if there must be trouble, let it be in my day, that my child may have peace ;" and this single reflection, well applied, is sufficient to awaken every man to duty. Not a place upon earth might be so happy as America. Her situation is remote from all the wrangling world, and she has nothing to do but to trade with them. A man may easily distinguish in himself between temper and principle, and I am as confident as I am that God governs the world, that America will never be happy till she gets clear of foreign dominion. Wars, without ceasing, will break out till that period arrives, and the continent must, in the end, be conqueror ; for, though the flame of liberty may sometimes cease to shine, the coal never can expire.

America did not, nor does not want force ; but she wanted a proper application of that force. Wisdom is not the purchase of a day, and it is no wonder we should err at first setting off. From an excess of tenderness, we were unwilling to raise an army, and trusted our cause to the temporary defence of a well meaning militia. A summer's experience has now taught us better ; yet with those troops, while they were collected, we were able to set bounds to the progress of the enemy ; and, thank God ! they are again assembling. I always considered a militia as the best troops in the world for a sudden exertion, but they will not do for a long campaign. Howe, it is probable, will make an attempt on this city ; should he fail on this side the Delaware, he is ruined ; if he succeeds, our cause

is not ruined. He stakes all on his side against a part on ours ; admitting he succeeds, the consequence will be, that armies from both ends of the continent will march to assist their suffering friends in the middle states ; for he cannot go every where ; it is impossible. I consider Howe as the greatest enemy the tories have ; he is bringing a war into their own country, which, had it not been for him and partly for themselves, they had been clear of. Should he now be expelled, I wish, with all the devotion of a christian, that the names of whig and tory may never more be mentioned ; but should the tories give him encouragement to come, or assistance if he come, I as sincerely wish that our next year's arms may expel them from the continent, and the congress appropriate their possessions to the relief of those who have suffered in well-doing. A single successful battle next year will settle the whole. America will carry on a two-years war by the confiscation of the property of disaffected persons, and be made happy by their expulsion. Say not that this is revenge : call it rather the soft resentment of a suffering people, who, having no object in view but the good of all, have staked their own all upon a seemingly doubtful event. Yet it is folly to argue against determined hardness : eloquence may strike the ear, and the language of sorrow draw forth the tear of compassion, but nothing can reach the heart that is steeled with prejudice.

Quitting this class of men, I turn, with the warm ardour of a friend, to those who have nobly stood, and are yet determined to stand the matter out. I call not upon a few, but upon all ; not on this state, or that state, but on every state. Up and help us. Lay your shoulders to the wheel. Better have too much force than too little, when so great an object is at stake. Let it be told to the future

world, that in the depth of winter, when nothing but hope and virtue could survive, that the city and the country, alarmed at one common danger, came forth to meet and to repulse it. Say not that thousands are gone : turn out your tens of thousands : throw not the burden of the day upon providence, but shew your faith by your good works, that God may bless you. It matters not where you live, or what rank of life you hold ; the evil or the blessing will reach you all. The far and the near, the home counties and the back, the rich and the poor, shall suffer or rejoice alike. The heart that feels not now, is dead. The blood of his children shall curse his cowardice, who shrinks back at a time when a little might have saved the whole and made them happy. I love the man that can smile in trouble—that can gather strength from distress, and grow brave by reflection. It is the business of little minds to shrink ; but he, whose heart is firm, and whose conscience approves his conduct, will pursue his principles unto death. My own line of reasoning is to myself, as strait and clear as a ray of light. Not all the treasures of the world, so far as I believe, could have induced me to support an offensive war ; for I think it murder : but if a thief break into my house—burn and destroy my property, and kill, or threaten to kill me and those that are in it, and to “bind me in all cases whatsoever,” to his absolute will, am I to suffer it ? What signifies it to me, whether he who does it, is a king or a common man ; my countryman, or not my countryman ; whether it is done by an individual villain, or an army of them ? If we reason to the root of things, we shall find no difference ; neither can any just cause be assigned, why we should punish in the one case and pardon in the other. Let them call me rebel, and welcome ; I feel

no concern from it ; but I should suffer the misery of devils, were I to make a whore of my soul, by swearing allegiance to one whose character is that of a sottish, stupid, stubborn, worthless, brutish man. I conceive likewise, a horrid idea in receiving mercy from a being, who at the last day, shall be shrieking to the rocks and mountains to cover him, and fleeing with terror from the orphan, the widow, and the slain of America.

There are cases which cannot be overdone by language ; and this is one. There are persons, too, who see not the full extent of the evil that threatens them. They solace themselves with hopes, that the enemy, if they succeed, will be merciful. It is the madness of folly, to expect mercy from those who have refused to do justice : and even mercy, where conquest is the object, is only a trick of war. The cunning of the fox is as murderous as the violence of the wolf, and we ought to be equally on our guard against both. Howe's first object is partly by threats, and partly by promises, to terrify or seduce the people to give up their arms, and receive mercy. The ministry recommended the same plan to Gage ; and this is what the tories call making their peace—“a peace which passeth all understanding,” indeed. A peace which would be the immediate forerunner of a worse ruin than any we have yet thought of. Ye men of Pennsylvania, do reason upon those things ! Were the back counties to give up their arms, they would fall an easy prey to the Indians, who are all armed. This, perhaps, is what some tories would not be sorry for. Were the home counties to deliver up their arms, they would be exposed to the resentment of the back counties, who would then have it in their power to chastise their defection at pleasure. And were any one state to give up

ts arms, that state must be garrisoned by all Howe's army of Britons and Hessians, to preserve it from the anger of the rest. Mutual fear is a principal link in the chain of mutual love, and woe be to that state that breaks the compact. Howe is mercifully inviting you to barbarous destruction, and men must be either rogues or fools that will not see it. I dwell not upon the vapours of imagination. I bring reason to your ears; and in language as plain as A, B, C, hold up truth to your eyes.

I thank God, that I fear not. I see no real cause for fear. I know our situation well, and can see the way out of it. While our army was collected, Howe dared not risk a battle: and it is no credit to him, that he decamped from the White Plains, and waited a mean opportunity to ravage the defenceless Jerseys: but it is great credit to us, that, with an handful of men, we sustained an orderly retreat for near an hundred miles, brought off our ammunition, all our field pieces, the greatest part of our stores, and had four rivers to pass. None can say, that our retreat was precipitate: for we were near three weeks in performing it, that the country might have time to come in. Twice we marched back to meet the enemy, and remained out till dark. The sign of fear was not seen in our camp: and had not some of the cowardly and disaffected inhabitants spread false alarms through the country, the Jerseys had never been ravaged. Once more, we are again collected and collecting. Our new army, at both ends of the continent, is recruiting fast: and we shall be able to open the next campaign with sixty thousand men, well armed and clothed. This is our situation—and who will, may know it. By perseverance and fortitude, we have the prospect of a glorious issue; by cow-

ardice and submission, the sad choice of a variety of evils—a ravaged country—a depopulated city—habitations without safety—and slavery without hope—our homes turned into barracks and bawdy-houses for Hessians—and a future race to provide for, whose fathers we shall doubt of! Look on this picture, and weep over it! and if there yet remains one thoughtless wretch, who believes it not, let him suffer it unlamented.

(To be continued).



Memoranda.

WHEN the first American fleet was fitted out, under the command of commodore Hopkins, it was expected it would not have been able to sail for want of sea-lanterns of a particular construction. The next post, after a discovery of this want, brought news that captain Manly had sent into one of the New England ports, a prize, with exactly the number and kind of lanterns which were wanted.

IN the second or third year of the war, two thousand muskets were wanted for a particular service. The congress spent several hours in devising ways and means to procure them. While mr. Wilson, of Pennsylvania, was speaking upon the subject, and proposing a method of obtaining them, which was both uncertain and distressing, the door-keeper to congress called him out, and introduced him to a captain of a vessel, who had just arrived. After a few minutes conversation with him, mr. Wilson returned, and terminated the business before congress, by informing them, that a vessel had just arrived, with two thousand muskets on board, on account of the united states.

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An Ode—Written by Col. Humphreys.

Inscribed to General Washington.

BY broad Potowmack's azure tide,
Where Vernon's mount, in sylvan pride,
Displays its beauties far,
Great Washington to peaceful shades,
Where no unhallow'd wish invades,
Retir'd from fields of war.

Angels might see, with joy, the sage,
Who taught the battle where to rage,
Or quench'd its spreading flame,
On works of peace employ that hand,
Which wav'd the blade of high command,
And hew'd the path to fame.

Let others sing his deeds in arms,
A nation sav'd, and conquest's charms;
Posterity shall hear,
'Twas mine, return'd from Europe's courts,
To share his thoughts, partake his sports,
And soothe his partial ear.

To thee, my friend, these lays belong:
Thy happy seat inspires my song,
With gay, perennial blooms,
With fruitage fair, and cool retreats,
Whose bow'ry wilderness of sweets
The ambient air perfumes.

Here spring its earliest buds displays,
Here latest on the leafless sprays,
The plummy people sing;
The vernal show'r, the rip'ning year,
Th' autumnal store, the winter drear,
For thee new pleasures bring.

Here lapp'd in philosophic ease,
Within thy walks, beneath thy trees,
Amidst thine ample farms,
No vulgar converse heroes hold,
But past or future scenes unfold,
Or dwell on nature's charms.

What wondrous era have we seen,
Plac'd on this isthmus, half between
A rude and polish'd state!

We saw the war tempestuous rise,
In arms a world, in blood the skies,
In doubt an empire's fate.

The storm is calm'd, seren'd the heav'n,
And mildly o'er the climes of ev'n,
Expands th' imperial day :

" O God, the source of light supreme,
" Shed on our dusky morn a gleam,
" To guide our doubtful way !

" Restrain, dread pow'r, our land from crimes !
" What seeks, tho' blest beyond all times,
" So querulous an age ?
" What means to freedom such disgust,
" Of change, of anarchy the lust,
" The fickleness and rage ?"

So spake his country's friend, with sighs,
To find that country still despise
The legacy he gave—
And half he fear'd his toils were vain,
And much that man would court a chain,
And live through vice a slave.

A transient gloom o'ercast his mind :
Yet, still on providence reclin'd,
The patriot fond believ'd,
That pow'r benign too much had done,
To leave an empire's task begun,
Imperfectly achiev'd.

Thus buoy'd with hope, with virtue blest,
Of ev'ry human bliss possesst,
He meets the happier hours ;
His skies assume a lovelier blue,
His prospects brighter rise to view,
And fairer bloom his flow'rs,



*The shield of Achilles, translated from the Greek of Homer.
Iliad XVIII. By the late Dr. Ladd.*

THEN form'd the artist-god, by skill divine,
Th' enormous work, and bade the surface shine ;
A silver chain suspends the glowing shield,
And three rich circles glitter round the field.
Broad and five-fold of spacious plates 'twas made,
Where the great master all his art display'd :
Heav'n, earth, and sea in wond'rous order shone,

The full round moon, and the unwearied sun;
 The burning stars that o'er Olympus rise,
 Crown the high heav'ns, and glitter in the skies.
 Pleiads and Hyads, and refulgent there
 Shone great Orion, with the constant bear,
 (Oft call'd the Wain) the star that never laves
 Her glowing axle in old ocean's waves,
 But wheeling round the pole with constant light,
 Keeps the red dog-star ever in her sight.

Two cities next the artist's hand display'd,
 Where nuptial feasts and festivals were made;
 The spouses from the bridal chambers came,
 Led thro' their city by the torch's flame;
 From ev'ry mouth soft hymeneals sound,
 The rapid youths in circling dances bound,
 Breathe the sweet flute, and tune the silver lyre,
 From every porch the female crouds admire.

The market next contain'd a gather'd croud
 Where two dispute, contentious and aloud:
 A murd'rer he, from whose polluted hands,
 To urge the fire, his stern accuser stands:
 He pleads the payment made, and both demand
 Impartial justice from some judge's hand;
 Th' applauding croud their acclamations rais'd,
 And now the one, and now the other prais'd,
 While sacred heralds, thoughtful and profound,
 Still'd the loud shouts, and rang'd the people round:
 On seats of polish'd stone, to hear the case,
 The rev'rend elders fill'd the middle place;
 Each in his turn, slow rising from his seat,
 The sceptre wav'd, and govern'd the debate;
 Two golden talents in the midst were laid,
 And his the prize who better judgment made.

The other town two glitt'ring hosts besieg'd;
 There flash'd their armour, there the battle rag'd;
 Both disagreed, if better to decide
 The city's ruin, or the spoil divide.
 Mean time the pris'ners secretly prepare
 For sudden ambush, and impetuous war.
 While, left behind the walls, their city's aid,
 The fires, the matrons, and the children staid:
 Fierce at their head, Mars and Minerva came,
 The gods of gold in golden armour flame:
 They move distinguish'd by superior height,
 More sweet proportions, and a blaze of light.
 Now at their stand they come, a river's brink,
 Where lowing herds and thirsty cattle drink;
 Hid by their shields, the margin'd stream they line,
 Two spies, at distance, watch the lowing kine;
 The num'rous cattle, and white flocks appear,
 Slowly they move, two shepherds in the rear;

They tune their dulcet reeds, and all the way
Suspect no danger, thoughtless as they play.
Now swift in view the rushing foe appear'd,
They kill the swains, and captivate the herd ;
The distant bands, rous'd at the shrill outcry,
On thund'ring courfers to the battle fly.
Then spears to spears, the diff'ring hosts engag'd,
Loud roar'd the war, and fierce the battle rag'd ;
Fate and loud tumult shake the echoing heath,
And discord busy in the work of death.
There might you see the cruel Parca's hand
Drag the dead soldier thro' the bloody band ;
One pierc'd with deadly wounds beside her bled,
Her steel flash'd lightning o'er another's head.
All grim with blood she thro' the battle tore,
And her stain'd garments drop'd with human gore.
Each form appear'd upon the wond'rous shield,
To live, to move, to battle o'er the field :
You'd think the figures really drew their dead ;
That the gold liv'd, and that the silver bled.

A large deep furrow'd field was next display'd,
Where thrice the plough share had unbound the glade ;
Their useful team the sweating lab'ers steer,
And move on ev'ry side the stubborn share ;
Till, as they turn to end each furrow'd line,
They meet the goblet foaming o'er with wine.
Chear'd with the draught, a backward course they bend,
And eager hasten to the next land's end ;
The field (Vulcanian art) was form'd of gold,
But black behind the turn'd-up furrows roll'd.

Another field the god-like hand engrav'd,
Where yellow corn high o'er the surface wav'd ;
Each reaper bending, handled the sharp steel,
The swarths in thick and equal furrows fell ;
Three steady lab'ers stand in act to bind
The thick-strewn corn, and follow close behind ;
While panting children carry to be bound
The thin loose swarths that scatter on the ground.
Amidst the heaps the master takes his stand
With silent joy, a sceptre in his hand :
Distant from these his household stand, and there
The feast beneath a shadowy oak prepare :
The victim ox they hold—and women knead
Their cates of wheaten flour—the reapers' meed.

A vineyard next beneath his hand arose,
In rip'ning gold the yellow vintage glows ;
The dark plump grapes in heavy clusters rest
On props of silver, " suing to the press."
A diff'rent metal closes all within,
A darken'd trench, and pallisades of tin ;
One narrow path leads winding to the place,

'Thro, which the lab'ers to the vineyard pass ;
 With woven baskets, forming in a line,
 The youths and maidens bear the latent wine.
 'Midst these a youth attunes the trembling strings,
 Old Linus' song the charming lyrist sings :
 They dance responsive to the tuneful sound,
 All join in chorus, and the song goes round.

Now herds of gold appear ; the oxen tall
 Erect their heads, and bellow from the stall,
 Haste to the meadows, where with stunning sound,
 The rapid torrent thunders thro' the ground.
 Four herdsmen follow, glitt'ring in the gold,
 And nine large mastiffs, terrible and bold.
 Two shaggy lions seize a bull—in vain
 He roars, he struggles, dragg'd across the plain ;
 They tear his entrails, and they quaff the gore,
 While swift to rescue, dogs and herdsmen pour ;
 In vain the herdsmen hearten them to rage,
 The dogs bark distant, fearful to engage.

Next a fair scene the ravish'd eye beholds ;
 A beauteous valley to the sight unfolds ;
 White, snowy flocks of fleecy sheep are here,
 And folds, and sheds, and cottages appear.

Then form'd the master hand the smooth advance,
 And various figure of the waving dance :
 Such Ariadne, beauteous queen, beheld
 In Gnosus court, by Dædalus reveal'd ;
 There hand in hand the youths and maidens join,
 Form the sweet wave, and undulate the line ;
 The youths in glossy shining silks appear,
 The beauteous maidens in the white cymar ;
 Fair wreaths of flow'rs their lovely locks embrace,
 The youthful band the golden falchions grace ;
 All gaily at their sides, with graceful swing
 They hang suspended by a silver string.
 Here swift they move, and rapid as they fly,
 The varying forms seem blended in the eye,
 Whirl'd in a circle flies the giddy reel,
 As on its centre turns the rapid wheel,
 (His finish'd labour when the potter tries,)
 And all too rapid for the sight it flies :
 At once they move, thro' devious mazes meet,
 And wind away the dance with measur'd feet :
 Unnumber'd crouds enjoy the pleasing sight,
 And gaze the revels eager with delight.
 In active feats two nimble tumblers bound,
 While the whole circle bears the song around.

Thus grew the mighty shield : around the verge
 Pour'd the great ocean with its rapid surge ;
 He made the deep its whole circumf'rence lave,
 And smooth against it beat the silver wave.

Foreign Intelligence.

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Temeswar, Feb. 11.

THE siege of Belgrade will not commence until March; it is furnished with 600 cannon; the garrison consists of more than 15,000 Janissaries.

Warsaw, February 23.

We learn from Kamienieck, that the Austrian general offered the pacha of Choczim, the most honourable terms of capitulation for himself and people under him, if he would surrender the place before the arrival of the Russians; who, he said, would carry fire and sword wherever they found any resistance. The pacha required twelve days to give a final answer, but at the same time said, that he and the people were faithful servants of the Sultan, and if they were attacked, would defend themselves. The same proposals have been made by the Austrians on the frontiers of Moldavia to the Ottoman commanders of strong places in that principality.

March 1. When the imperial declaration of war was published in the Ottoman army, many of the troops are said to have marched home.

Hamburg, March 4.

The court of Vienna has not yet published the dispatches received from the prince of Saxe Cobourg, commander in chief in the Buckowine; a part of the army under him, in Moldavia, passed the river Pruth, in order to take advantage of the fortress of Choczim. On this occasion, a very lively skirmish took place between the advanced guard of that corps, and a large body of Tartars, who, after an obstinate resistance, and the loss of some thousand men, were obliged to make a hasty retreat to Choczim. The loss on the side of the Austrians was not less considerable; particular-

ly in the three battalions of Palegrini, Charles of Tuscany, and of Samuel Giulay, which suffered greatly. This news not having been confirmed at Vienna, was considered as rather doubtful.

London, February 21.

We learn that the treaty between Britain, Berlin, and the United States, is put into such a train of settlement, that there are hopes of its being finally concluded before the meeting of parliament. With this union, there is no doubt but we may speak with so decisive a tone to every kingdom of Europe, that we may hold at nought their combinations, however threatening.

March 1. Died, on the 31st of January last, aged 67 years and two months, Charles Edward Lewis Casimer Stewart, who, since the death of his father in 1765, assumed the title of king of England, but commonly known on the continent by the name of the chevalier de St. George, and in England by that of the young Pretender.

March 20. That the views of the French nation are placed upon some great future acquisition in India, cannot be doubted, from its present establishment, so superior to the protection of its possessions, as to incur a constant expence to their government to support them. Not less than a million of dollars, (224,000l.) was sent out to Pondicherry, in 1785, for the purpose of fortifying that city, and paying the troops stationed there, although its districts, with those appendant to Karicat, do not annually produce more than three lacks of rupees. In August, 1785, it was ascertained, that there were at Pondicherry and the isles, upwards of five thousand regular troops; to which, in case of war, Bourbon could add a corps of one thousand men, it being the only place east of the Cape, with a re-

respectable yeomanry. The body of Europeans, with what reinforcements it might receive from home, would be united before even notice of such an intention could be had at Madras: the situation of the French African islands, out of the line of our ships, favouring expeditions against India, and their fertility supplying all the vegetables and fresh provisions required for voyages in tropical climates.

The present standing army of France is 364,556 troops.

The Spanish army is estimated at 200,000, but the majority of the corps perhaps not distinguished by either discipline or loyalty.

March 21. Our letters from Holland, by yesterday's mail advise, that the partial amnesty which had been published by their high mightinesses, the states-general, on the recommendation of the hereditary prince stadtholder, had caused great murmurs and riots in the province of Holland, particularly at Amsterdam—in so much, that their high mightinesses judged it advisable forthwith to issue one of a more extensive and liberal nature.

By the last mail from France, intelligence was received (the authenticity as well as the probability of which, however, is doubted) that the French court had just received an overland express from India, with the important advice, that in the beginning of December last, on the arrival of the accounts sent from England of the likelihood of a rupture with France, the governor of Madras took sudden possession of Pondicherry.

Although no American agent is stationed at the court of Lisbon, we understand that a treaty of commerce has been agitated through the means of Mr. Adams, between the Portuguese and the United States. The only obstacle to its accomplishment respects the introduction of American wheat

into Portugal, and the establishment of a free port in one of the western islands.

These are points anxiously stipulated on the part of Congress, but declared by the Portuguese government to be incompatible with the treaties in existence with other powers, who are unquestionably to enjoy whatever may be conceded by any subsequent arrangements. The pride of that court seems a little hurt by the disrespect which has been shewn to it by the Americans, and the queen jocularly observes, that as she was always a whig in her heart, the United States, in their rage for appointing envoys and ambassadors, might have favoured her with a visit.

The Spaniards have at length agreed to suffer the Russian fleet to enter the Mediterranean; this was brought about by the interference of the French court.

March 22. The presbytery of Edinburgh, thro' Sir Adam Ferguson, have petitioned parliament against the African slave trade.

It is reported that a very unexpected change has taken place in the politics of this country, as far as they relate to our northern connections.

The countess of Albany, widow of the late Pretender, enjoys a pension of sixty thousand livres from the French treasury.

The Spaniards are making the most active preparations in equipping a fleet. The Castile man of war, and the Le Saint Florentine transport are ordered immediately from Cadix to the Havannah, with provisions, troops, and some officers.

The remonstrances from the different parliaments, in favour of the duke of Orleans, M. Sabatier and de Froteau, are urging with more importunity.

A letter from Brussels, dated March 1, says, "The Brabantine have at length submitted. The chan-

cellor has been among the foremost to agree to the commands of his sovereign. The conditions are, however, neither disgraceful nor unfavourable to the people. All the recruits, as they are raised in the Low Provinces, are brought here, and trained and disciplined; so that the city begins to look very warlike. All the levies will not, however, be sent to Germany. Some of them will be incorporated among the corps now stationed in Flanders."

The Russians have begun the siege of Oczakow. It is from the army under the command of Prince Repnin, which is so advantageously posted as to have had the first intelligence of this event, that the news comes.

The Venetians are resolved to observe a strict neutrality in the present contest between Russia and the porte.

March 25. Letters have been received in town, stating, that on the 20th instant, the dauphin of France, who had been for some time in a very ill state of health, expired at noon, at the Chateau de St. Lewis. Nothing more than this has been related, and not having received a confirmed account of the event, we do not vouch for its authenticity.

The states general have ordered a medal, of 1300 florins value, to be presented to his excellency John Adams, the American ambassador, as a testimony of their approbation of his conduct.

Sir F. Haldimand is talked of to succeed to the governor-generalship of Canada, if lord Dorchester should give up, as expected; his health, as it is said, being too much impaired to bear the vicissitudes of another winter in Canada.

March 30. A scheme is in agitation to encourage the general culture of hemp in Great Britain and Ireland, in order to prevent the sums of money sent out of the kingdom every

year for those articles, to Russia and other places. The encouragement is intended to be extended to the British colonies: but nothing will be attempted till the next year.

Although the various accounts from Spain differ, as to the number of ships preparing for sea, at Cadiz, and all of them seem ignorant of the cause of this armament, yet it is agreed that a considerable number of ships of the line are preparing there, and, according to orders, should be ready by the beginning of April. This seems to accord with what lord Stormont mentioned last week in the house of peers.

France has only to keep out of the present continental dispute, and she has nothing to apprehend: for let who will gain the day, each way will be her gain; if the Turks conquer, she remains in perfect security of the Levant trade; while on the other hand, should the imperialists be crowned with the palm of victory, the Russians will be enabled to supply her with hemp, cordage, and many other articles with more ease, and consequently at a much cheaper rate.

The prohibition published in the gazette of Tuesday, that no English seamen should leave the kingdom to serve on board foreign ships of war, without the permission of government, has given rise to much speculation. A message was sent a few days since by the marquis of Carmarthen to mr. Thornton, that government would not allow any English seamen to navigate the transports that had been contracted for by the Russian minister, to transport their troops, which has produced a representation and a visit from comte Woronzow both to mr. Pitt and the marquis of Carmarthen. He stated, that government had been very active in watching the present occasion, at the same that they had allowed English sailors to navigate the frigates that had late-

ly failed for the service of the Turks. The answer to this was, that ministry knew nothing of the circumstance, and could therefore take no cognizance of it. And thus the matter at present stands.

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American Intelligence.

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Salem, April 29.

We are informed, that Mr. Jonathan Gavett, an ingenious mechanic of this town, has contrived a very useful machine for the sowing of seeds. It performs, with one effort, all the operations of making the furrows, sowing the seed, and covering it—and may be used by a child capable of performing any kind of manual labour. It is simple in its construction, and may be made for a trifling expence.

Boston, May 1.

At Beverly lately, an experiment was made with a complete set of machines for carding and spinning cotton; which answered the warmest wishes of the proprietors. The spinning jenny spins 60 threads at a time—and with the carding machine, 40lb. of cotton can be well carded per day. The warping machine, and the other tools and machinery, part of which go by water, are complete—perform their various operations to great advantage, and promise much benefit to the public, and emolument to the patriotic adventurers.

We are assured, that a French squadron may be expected to arrive in this port, about the 1st of July—to continue here two or three months. It will be nearly of the same force as that under Le Viscount Beaumont—and will be commanded by Mons. de Senneville,

May 12. A glass manufactory, we are told, is established at Hartford, which promises much advantage to the proprietors—14,000l. is the sum subscribed.

We hear that on Saturday last, two piers of the bridge erecting between Salem and Beverly were fixed; and that the persevering spirit which attends that business promises its speedy completion.

A woollen manufactory is established at Hartford, in Connecticut, and five gentlemen appointed to superintend and conduct it.

Newport, (R. I.) May 15.

The revolving year hath produced no important change in our administration nor in our police. The crass fading errands still display the destroying standard, “a depreciated paper money,” as the ark of our salvation. No experience of the mischiefs resulting from it, nor any conviction of its injustice, tends to check a “perseverance;” for credulity and implicit support of this system, are marked out as the high road to preferment, while honour, virtue and abilities, form no criterion of merit.

Loud advocates for the extremes of liberty, they can bear no discussion of their measures without irritation: that freedom of speech which elevated America to the station of independence, is viewed as treason and rebellion, and the blood of the free-men seems alone sufficient to satiate revenge.

Apprehensive of the ratification of the new constitution, men of tried antifederalism are advanced to the command of forts and of the militia; whether that they may be prepared to oppose the union, or to keep alive popular clamour, we presume not to determine.

New-London, May 9.

About fifteen minutes past seven o'clock, on Tuesday morning last, a

light shock of an earthquake was felt in this town, and in Groton, preceded by a rumbling noise. The same shock was felt at Newport.

New-York, May 8.

A letter from Cherburgh, to a gentleman in London, dated Feb. 24, says, "funds are established for carrying on our works here, notwithstanding the reforms which it is found necessary to make. By the month of June we shall have four new cones; and those which have been damaged, will be repaired by that time. The English have been deceived in imagining that we should abandon these works, and give up the idea of having a port in the Channel. This must have originated from the exaggerated reports of the damage done to the cones. No part of them has suffered, but what was above the water. The foundation and the dyke, which unites the cones, remain firm and immovable. In about four years, we expect that they will be completed. Several vessels have already been sheltered by these works. Among others, there is a ship of sixty-four guns at present in the port."

Lexington, March 27.

On Saturday evening, the 21st instant, some time after night, a party of about seven Indians knocked at the door of the widow Shanks, (living on Townsend, a branch of Licking) and demanded entrance, which was denied them: they then set fire to the house, and by that means, forced the family out; four of which fell a sacrifice to their savage fury, and one was taken alive; the rest escaped. The snow falling that night, enabled the inhabitants to follow them: they came up with them the next day; killed one and wounded another: the rest escaped, leaving all their baggage. The prisoners taken, they had tomahawked, just before the white people came up with them.

One other Indian was found dead near where they committed the murder; supposed to have been killed by a young man whom they murdered the evening before.

Philadelphia, May 22.

May 3. We learn that Mr. Bordley, of the eastern shore of Maryland, has presented the agricultural society of this city, with a model of a threshing machine, which is somewhat on the construction of a coffee mill, and will thresh above a hundred bushels of wheat in a day, with one man's labour. Machines appear to be objects of immense consequence to this country. Every month furnishes us with something new and important of that nature. It is the duty of every friend to America, at home and abroad, to keep a vigilant eye upon every thing of that kind which comes in his way. We may invent, and we may borrow of Europe her inventions. Possessed of soil without end, every thing that saves the labour of hands, is a gain of peculiar value to us.

The following appears in the proceedings of the British house of commons, of Feb. 8, "The right honourable F. Montague presented a petition from lady Penn, and the junior part of her family, stating, that by the late act of assembly in Pennsylvania, all compensation was refused for their possessions which had been wrested from them in the late disturbances, and paying for parliamentary relief."

May 16. A letter from a gentleman in Paris, to his friend in Baltimore, dated Feb. 3, says, "I have much satisfaction in informing you, that the laws constituted by the federal convention, [i. e. the new constitution] have made great noise in Europe. In England they are so much admired, that they have been printed, and are profitable to the printer.—

Every body praises them ; but more than they otherwise would, did they not flatter their laws, which they esteem the most perfect. In France, they are highly esteemed also, and the sentiments upon them more liberal. The parliaments of France, but particularly that of Paris, for some time past have endeavoured to clip the wings of their monarch, to prevent his high flights ; and in fact, have lately succeeded in their attempts, by establishing laws upon more liberal principles than heretofore. Since the American revolution, they have been seeking after something—and at last, like a divine charm, have met with that which opens their eyes, and restores them to light : the late laws, of which we are speaking, have produced those effects : they have been before the parliament of Paris as a model of wisdom to be copied after—they were there amply discussed, and most ably defended by a majority of the house ; however, there was one member violent in his opposition ; but from one of his speeches, you will find that prejudice influenced him.—“ Do you think,” says he, “ gentlemen, that an old nation like this, will take for its model the laws of an infant country, which does not yet know how to carry the bread to its mouth ? no !” This you see is ridiculous, and not only repugnant to the opinions of some of the greatest politicians, but even to nature and common sense ; and contradicted by innumerable facts, many of which were pointed out to him the next day by the count de Mirabeau, who took an opportunity of exposing him in the public papers, and therefore of extolling America to the stars, by saying that in less than thirty years, it would become the most renowned empire of the four parts of the world ; and this I can tell you is a very general opinion. The objections here to the constitution, are, that the presi-

dents ought not to be chosen during their good behaviour, but for a certain time only, that the honour may not be a matter of too much contention, which would generally be the cause of bloodshed, slaughter, anarchy, and confusion ; that the legislative and executive powers ought to be separated, and that there should be a bill of rights. The states of Holland, sensible of the rising progress of America, from considering its resources, its commerce, and the disposition of its inhabitants, have offered congress, through the hands of Mr. Jefferson, the American ambassador at Paris, a loan of 80,000*l.* sterling to be delivered as soon as there is a permanent government established—certain that their money will be more secure in the American fund than any other whatever. Their reasoning is sensible and founded upon just principles : they say that America is large and extensive, and must soon become opulent from its commerce : that since the peace they have sunk eight millions of the debt, and have still a principal to sink the capital entirely ; that while no other country whatever thinks so, and that after this is once accomplished, America will be one of the most free and unembarrassed nations in the universe. To give you an idea more particularly of the opinions of the Hollanders, an American gentleman had purchased a number of continental certificates at twelve per cent with which he went to Holland, not expecting to make any thing of them ; but when he arrived there, he found the inhabitants so well disposed towards the Americans, and having a good opinion of their probity, that he sold his certificates at sixty per cent. to the amount of 150,000*l.* sterling. This you may depend upon as a matter of fact, for I have it from the best authority.”

On Thursday the 8th inst. the an

niversary election of supreme magistrates, and other officers, for the government of the state of Connecticut, was held at the city of Hartford; when his excellency Samuel Huntington, esq. was elected governor, and the hon. Oliver Wolcott, esq. lieutenant-governor.

A letter from a gentleman in New Orleans, to his friend in this city, dated March 25, says, "the misery of this place I shall not undertake to describe; suffice it to tell you, that New Orleans, which consisted of 1100 houses, was, on Friday last, in the space of five hours, reduced by conflagration to 200. The rapid progress of the fire was such, that but little merchandize, household furniture or clothing has been saved."

Saturday night, the 3d inst. two fine bullocks were killed on State-Island by a flash of lightning. Two other cattle were also struck dead at Point-no-Point, during the storm of rain, thunder and lightning, which prevailed for several hours that night.

May 27. By an act of the British parliament lately passed, entitled, "an act for regulating the trade between the subjects of his majesty's colonies and plantations in North America and the countries belonging to the united states of America," &c. it is enacted—

"That no goods or commodities whatever shall be imported or brought from any of the territories belonging to the said united states of America, into any of his majesty's West India islands (in which description the Bahama and the Bermuda islands are included) under penalty of the forfeiture thereof, and also of the ship or vessel in which they shall be so imported or brought, together with all her guns, furniture, ammunition, tackle, and apparel, except tobacco, pitch, tar, turpentine, hemp, flax, masts, yards, bowsprits, slaves, heading, boards, timber, shingles,

and lumber of any sort; horses, neat cattle, sheep, hogs, poultry, and live stock of any sort; bread, biscuit, flour, peas, beans, potatoes, wheat, rice, oats, barley and grain of any sort; commodities respectively, being the growth or production of any of the said united states of America."

The above enumerated articles, that are permitted to be imported, must be brought by British subjects, in British ships, on penalty of forfeiture.

May 31. A letter from Charleston, dated May 22, says, "The convention of South Carolina, met at Charleston on the 13th. Governor Pinckney, president.

"They proceeded to debate on the constitution by paragraphs; got thro' on the morning of the 21st, when a motion was made for adjournment to October next.

"This was warmly opposed, and the motion was lost by a majority of 46, viz. 135 against 89.

"The reasons given in favour of the adjournment were,

"First. That the people in the back countries were not sufficiently informed in regard to the constitution, and ought to have more time.

"Second. That many delegates from the country had come down, biased themselves, and instructed by their constituents, against the constitution—that since they had heard the debates, their sentiments had greatly changed; in consequence of this they wished to have time to return to their constituents and bring them over also, otherwise they were fearful the people whom they represented, would think that their delegates had been forced to an adoption.

"Many persons who voted in favour of the adjournment did so merely through accommodating and mild principles; but since the motion is lost, will vote in favour of the constitution.

'The question will this day be put on the close of the business, whether this convention will ratify the new constitution. Some debate will ensue, but it is confidently said, there will be a very large majority in favour of it.'

A letter from Baltimore, dated May 27, says, "we have received intelligence, that Mr. Samuel Purviance, with fourteen other prisoners, were met within fifty miles of Sandusky: all well."

A letter from Carlisle, dated May 10, says, "Our commencement is over. Eleven young gentlemen were admitted to degrees. All their orations were in favour of the new constitution. Dr. Nisbet is a warm federalist."

His Britannic majesty hath given his royal assent to "an act to continue the law in force for regulating the trade between the subjects of his dominions and the inhabitants and territories belonging to the united states of America, so far as the same relates to the trade and commerce carried on between Great Britain and the countries belonging to the said united states. At the same time also received the royal assent, "an act for regulating the trade between the subjects of his Britannic majesty's colonies and plantations in North America, and in the West India islands, and the countries belonging to the united states of America, and between his Britannic majesty's subjects and the foreign islands in the West Indies."

Lately died in London, Col. Guy Johnson, (son in law to the late Sir William Johnson, bart.) his Britannic majesty's superintendant of Indian affairs in North America.

MARRIAGES.

MASSACHUSETTS.—*At Salem*, Rev. Joshua Spalding, to Miss Susannah Douglass; Mr. Samuel Pritchard to Miss Alice Poor.

RHODE-ISLAND.—*At Newport*, Captain Caleb Gardiner to Miss Sally Fowler; Mr. Isaac Greenwood to Miss Deborah Langlye.

PENNSYLVANIA.—*At Philadelphia*, Doctor Casper Wistar to Miss Isabella Marshall; Peter Stephen du Ponceau Esq. to Miss Ann Perry; Dr. John Foulke to Miss Polly Parker; Jacob R. Howell, Esq. to Miss Elizabeth Burge; Mr. Jacob Peter to Miss Sarah Weifs.

VIRGINIA.—*At Alexandria*, Col. John Allison to Miss Rebecca M'Rhea.

SOUTH-CAROLINA.—*At Charleston*, Charles Goodwin, Esq. to Miss Elizabeth Williamson.

Deaths.

MASSACHUSETTS.—*At Boston*, Mr. John Williams; Col. Thomas Brackett; Mrs. Ann Swift.—*At Wrentham*, Deacon Joseph Hitchcock; *At East Hampton*, Mr. Summit Clap.—*At Branford*, Rev. Warham Williams.—*At Hingham*, the Rev. Joshua Prentiss.—*At Cambridge*, Mr. John Warland.

RHODE-ISLAND. *At Newport*, Mrs. Elizabeth Rathburn.

CONNECTICUT.—*At Woodbridge*; Mr. Jonathan Maxfield Peck.—*At Stonington*, Captain David Fitch.

NEW-YORK.—*At Long-Island*, Basil Jackson, Esq.

MARYLAND.—*At Baltimore*, Mrs. Elizabeth Clopper; Mrs. Frances Owings; Mr. John Cannon; Mr. Thomas Brady.—*At Prince George's County*, Mrs. Susannah Tyler.

VIRGINIA.—*At Alexandria*, Mr. William Anderson; Mr. Richard Westley.—*At Richmond*, Mrs. Mary Moore.—*At Hanover*, Mr. William Haywood.—*At Pocahontas*, Mrs. Mary Davenport.

SOUTH-CAROLINA.—*At Charleston*, Miss Maria Bay, Master William Hynes; Mr. Erasmus Audley.

BANKRUPTS.

WILLIAM G. SMITH, of the city of Philadelphia, merchant, dealer, and chapman.

JOSEPH PARKER, of the city of Philadelphia, merchant and dealer.

WILLIAM ROWLEY, of the county of Washington, dealer and chapman.

CROPLEY ROSE, of the city of Philadelphia, merchant.

THOMAS MAULE, and EBENEZER MAULE, of the county of Lancaster, dealers and chapmen.

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T H E
AMERICAN MUSEUM,
• R
R E P O S I T O R Y
OF ANCIENT AND MODERN
FUGITIVE PIECES, &c.
PROSE AND POETICAL.

For J U N E, 1788.



..... " *With sweetest flow'rs enrich'd,*
" *From various gardens cull'd with care.*"

* * * * *

..... " *Collecta revirescunt.*"



V O L. III. N U M B. VI.



P H I L A D E L P H I A:
P R I N T E D B Y M A T H E W C A R E Y.



M.DCC.LXXXVIII.



THE AMERICAN MUSEUM,

For JUNE, 1788.



Essay upon the unusual production of animals.

WHETHER there is such a thing as equivocal generation, by which is to be understood the production of any new species of animals, independent of a parent stock of the same kind, has been a subject of controversy amongst the learned. Some assert the reality of this doctrine; others as strenuously reject it: the latter are now generally reputed orthodox, amongst whom the celebrated dr. William Harvey, the first discoverer of the true circulation of the blood, is justly regarded as a principal writer. Both he and his followers affirm that all living creatures are produced from an egg, furnished by the female, and fecundated by the male animal.

From the knowledge acquired on this subject, by the deep researches of Hippocrates, Galen, and Aristotle, amongst the ancients, and of Malpighi, De Graaf, and, above all others, of the renowned Harvey before mentioned, amongst the moderns, this doctrine appears to be established upon an extensive induction of facts, experiments, and observations, carrying with them the force of conviction, so far as that induction reaches.

The only room which some suppose there may be for doubt of the universality of the proposition is, that a variety of animals have been found, at different times, to exist in the bodies of other animals, and in extraordinary places, which neither the discoverers of those animals, nor others, have been able to trace with clearness and certainty, to what mankind in general can deem a probable or satisfactory origin.

Whether it be owing to an impatience to arrive at some conclusion, which can ill brook the difficulties that stand in the way of such an enquiry—or to the rarity of the cases falling under the notice of persons capable of making a thorough investigation, and the tedious progress of experimental knowledge—or whether it is that we are apt to suppose the subject does not admit of mathematical certainty from the light of philosophy, I know not—but some men have had recourse to the doctrine of equivocal generation to account for those productions, as Aristotle and his followers had in other cases to certain occult qualities, a term by which they have endeavoured to conceal their ignorance of what they could not explain, but were unwilling to confess. Nor are there want

ing, in the present day, many persons, who will sooner deny the testimony of their own senses, than allow the existence of an animal production which surpasses their powers of comprehension. This, I imagine, proceeds from a false pride—a fear of being deemed credulous; because, in times of ignorance, the passions of illiterate men were easily wrought upon by fictions to believe in prodigies, whereby they were led blindfold into opinions of religion and philosophy, which had no solid foundation. The race of sceptics I refer to, deem it manly, not only to withhold their assent from truths they do not understand, but to disown and dispute the reality of them. They do not consider that by such conduct they endeavour to divest themselves and others of their rational faculties, and of that natural curiosity implanted in man by his Creator, for the wisest purpose, of investigating facts in order to obtain knowledge, which has given birth to discoveries no less beneficial than delightful to mankind.

To such men, I would briefly remark, that it is as much an argument of a weak mind to admit too little, as to believe too much:

I have been led into the above train of observation from a singular phenomenon that may be now seen in this city, which is worthy the attentive inspection of the curious ladies, gentlemen, philosophers, and physicians, particularly the latter, since, for aught they know, a proper examination of it may cast some useful light upon the functions and diseases of the animal body.

In the Pennsylvania packet of the 23d instant, an horse is advertised to be seen at the upper end of Arch street having a living snake existing in its eye. Fair, gentle, and learned reader, start not at this information, as if it were fictitious, or the child of fancy; but see and judge for your-

selves. The writer of this piece professes himself to have as little credulity, and to be no more liable to impositions from idle tales, than his neighbours. Indeed he has ever strenuously opposed what he deemed the speculations of visionary enthusiasts, bred by weak imaginations, and circulated by designing persons with a view to amuse or deceive the vulgar.

On first hearing of this extraordinary case, and till he had an opportunity of inspecting it, he believed the appearance might turn out to be some unusual disease, perhaps a filamentary production from a stroke on, or inflammation of, the organ of sight; and that a convulsion in the nerves of its coats might produce a tremulous motion in the humours, likely enough to impose on such as have no knowledge of the parts and mechanism of the eye. But, upon the closest examination, he is convinced that there is a real worm or snake in the eye of the horse, and is induced, with others, to call it by the latter name, not only from its appearance, and the briskness of its motions, which exceeds that of any worm he ever noticed, but because a snake is a genus of serpents, which is classed by Linnæus amongst amphibious animals, or such as are to be found on land and water; a worm is not.

To gratify the public, as well those who have now an opportunity of seeing it, as those who may never see it, he thinks it will not be amiss to deliver in a few words what he has been yet able to collect of its natural history.

The horse, in whose left eye this extraordinary sport of nature is visible, is a sorrel, nine years old, and belonged to a medical gentleman, near the lines at Elizabeth town. It was found in both eyes till within some months past. The first particular worthy of curiosity is, that about three months ago the owner drove it

in a chair, and though it was not known to be vicious before, it could not then be kept under government, but ran away with, and broke it to pieces. The right eye still continues in a sound state.

About nine weeks ago, a gentleman being upon the lines, the owner of the horse said he would shew him as great a curiosity as he had perhaps ever seen; namely a living snake in the eye of a living horse. Upon looking into it, to his great surprise, he could plainly discover the animal in all its parts, from extremity to extremity, in constant motion, in a somewhat convoluted form, its length being equal, as nearly as he could judge, to two diameters and an half of the horse's eye, which we may suppose will measure in all between three and four inches at the least; at that time, the clear part of the eye still retained its transparency, sufficiently to allow the whole appearance to be seen distinctly.

The horse was soon after purchased, and brought to Philadelphia, in order to indulge the virtuosi of every class, by giving them an opportunity of inspecting it themselves, and of communicating the result of their enquiries to the public at large.

The animal is since somewhat increased in length, and is as thick as a knitting needle, or a piece of twine, as nearly as can be determined through the intervening medium. At present, apparently from the brisk and almost continual motion of the animal, the aqueous and vitreous humours of the eye are in some measure confounded; and the septum or partition betwixt the anterior and posterior chambers broke down. The animal appears to be still receding into the back part, and by turns coming forward to the fore part of the eye, with a convoluted brisk motion. But the coats of the eye and humours have now somewhat of a milky appearance, or colour of an incipient cataract,

It may be justly presumed, that whatever was the state of that eye a few months ago, it is now blind. The lids of it are commonly shut, owing probably to the pain excited in the eye by so troublesome a guest. To get a good view of it, the keeper strikes the horse repeatedly on the back, at which, as if frightened, it opens the lids, and the eye continues to be disclosed for some time, which thereby gives an opportunity for inspection.

The milky appearance of late becomes gradually more opaque; from which circumstance, it is probable the view of the object will by degrees be more obscure, and, after some time, afford less satisfaction to the curious beholder, than what hitherto it has and does still afford.

The eye, and its contents, have been narrowly inspected by some gentlemen of the faculty, of distinguished ability, as anatomists and physiologists, who are cautious of pronouncing their sentiments, perhaps least a future inspection into it, after the death of the horse, may discover their opinion to be erroneous, and they may possibly imagine that it is an extraordinary disease or filamentary production, assuming that strange appearance, from the difficulty, if they allow it to be an animal, of accounting how it got there. As I depend on the clear view I had of it, and doubt not the above gentlemen will be as much at a loss, supposing it to be a filamentary production, to account for its vigorous lively motions as myself, I am content to be upon a level with them, and whilst I declare my opinion, that it is a living animal, I candidly own my ignorance how it came into the eye; though I am at no loss for such probable conjectures as please myself, however insufficient they may be to satisfy others.

But instead of leading the patient

and candid reader into groundless theories, I choose to refer all who doubt the fact, first to the history of the Guinea worm, of which there are instances, and I have seen one in the Pennsylvania hospital, extracted from the leg, several yards in length; secondly, to the well-known history of the jointed or ring-worm, bred in the liver of Mrs. Holt, in this city, of near 3 inches in circumference, and 20 in length*, recorded in the London medical essays: this I have seen in the curious cabinet of that eminent anatomist, Dr. Hunter, of London; thirdly to the engraving of a similar one, large as life, inserted in the second volume of the Edinburgh medical essays, plate 4th; and lastly to autopsy, by examining the eye in question, which will afford ocular demonstration of the fact.

I shall conclude this essay with some observations of that prince of anatomists in his day, the celebrated Ruysch, who, from a practice of dissection, continued for near 80 years, a skill, diligence, and accuracy in examining into morbid bodies, and a niceness in the art of dissecting and injecting the vascular system, excelled all his contemporaries in useful anatomical discoveries. His testimony in these matters was ever considered by Boerhaave, by Haller, and every medical writer since, to be as incontestible authority as that of any other whatever.

In his 16th observation of volume the first, he asserts it to be proved by daily experience, "that worms may be generated in all parts of the body." "I strangled a dog," says he, "that was very lively three hours after being fed, with a view to examine the

lacteal or milk vessels. On opening the belly of it, a live worm, at least two spans long, skipped out of it. I could discover nothing amiss in the omentum, nor any solution in the continuity of parts; and both the mysentery and intestines were found."

Again, in observation 54th, he says "I have had room given me to doubt, whether, as Harvey and his followers affirm, all animals are produced out of an egg, from worms being found in the arteries of living horses, as also from worms seen in the parenchyma or the glandular substance, as it is now called, of the liver; and also in the cystic duct and biliary pore of sheep; and very often in the gall bladder. I remember once to have seen them in the human kidneys, such as are more frequently met with in the kidneys of dogs. That worms have been sometimes found in the brain, nobody can gainsay, who will be at the trouble of turning over the writings of authors of high repute.

"By what passages those animals, or their eggs, were insinuated into the interior parts of the body, is not easy to determine. It does not seem probable that they could reach the forementioned places through the pores of the skin, or the organs of respiration, much less that their eggs were taken in at the mouth, and from thence proceeded to their respective places: nor yet is it likely they could remain entire in the stomach, where, in the process of chylification, there is a remarkable fermenting, and a breaking down of the parts of the food: nor can the chyloferous or lacteal vessels afford a passage to the eggs in their route. And lastly, no living mortal has ever seen exactly similar worms out of the body."

Here then we ought to pause, to acknowledge our doubts, till, if ever it please God, some happy genius

NOTE.

* For an account of this interesting circumstance, see American Museum, Vol. II. page 570.

may arise, who, taking delight to search every particular, *a priori*, and with mathematical precision, shall be able to throw clear and indubitable light on this abstruse subject. M. D. Philadelphia, May 26, 1782.



Some further account of the before-mentioned horse.—By the hon. Francis Hopkinson, esq.

HAVING been myself a witness to the following curious fact, I thought it should not pass unrecorded, especially as it occurred in this city.

A report prevailed last summer that a horse was to be seen which had a living serpent in one of his eyes. At first I disregarded this report: but numbers of my acquaintance, who had been to see the horse, confirming the account, I had the curiosity to go myself, taking a friend along with me. The horse was kept in Arch-street, and belonged to a free negro. I examined the eye with all the attention in my power, being no way disposed to credit the common report, but rather expecting to detect a fraud or vulgar prejudice; I was much surprised, however, to see a real living worm within the ball of the horse's eye. This worm was of a clear white colour, in size and appearance much like a piece of fine bobbin; it seemed to be from $2\frac{1}{2}$ to 3 inches in length, which, however, could not be duly ascertained, its whole length never appearing at one time, but only such a portion as could be seen through the iris, which was greatly dilated. The creature was in a constant lively vermicular motion; sometimes retiring so deep into the eye, as to become totally invisible, and at other times approaching so near to the iris as to become plainly and distinctly seen; at least so much of it as was within the field of the iris. I could not distinguish its head,

neither end being perfectly exhibited whilst I viewed it, and indeed its motion was so brisk and constant, that so nice a scrutiny was not to be expected. The horse's eye was exceedingly inflamed, swollen, and running; I mean the muscles contiguous to the eye ball, and seemed to give him great pain; so that it was with much difficulty the eye could be kept open for more than a few seconds at a time; and I was obliged to watch favourable moments for a distinct view of his tormentor. I believe the horse was quite blind in that eye, for it appeared as if all the humours were confounded together, and that the worm had the whole orb to range in, which, however, was not of a diameter sufficient for the worm to extend its full length, as far as I could discover. The humours of the eye were beginning to grow opaque like a chilled jelly, and became altogether so afterwards, as I was informed.

As this is a very uncommon circumstance, and may affect some philosophical doctrines, it is much to be lamented that the horse had not been purchased, and the eye dissected for better examination. That there was a living, self-moving worm within the ball of the horse's eye, free from all deception or mistake, I am most confident. How this worm got there, or, if bred in so remarkable a place, where its parents came from, or how they contrived to deposite their semen, or convey their egg into the eye of an horse, I leave for others to determine.—September 26, 1783.



The true nature and cause of the tails of comets, elucidated in a rationale agreeing with their several phenomena. By dr. Perkins, of Boston.

Prefatory advertisement.

THE substance of the following essay was written soon after the ap-

pearance of the comet of 1769, and shewn to a gentleman or two of character, as a philosophic amusement, and the thing went no farther : but an hypothesis of a very different nature having lately appeared, and seeming to be taking place as a proper solution of the phenomena, the author thought himself interested to publish what he had so far exposed, with a few alterations to suit the just mentioned occasion.

The subject in itself is, indeed, of little importance : but right notions of the works and operations of nature are in many respects otherwise. Right notions of things improve the mind : and a just manner of reasoning, *a posteriori*, even in the smaller and less important matters, capacitates it for determining, more safely, in matters of greater weight : on the contrary, an easy yielding to specious appearances, and resting at the mere semblances of truth, corrupts and depraves it ; to which we may add, that lesser errors ever lead to greater.

What there is of truth in the performance, is, with all due respect, left to the judgment of those better versed in the nature of things, by

Their very humble servant,
THE AUTHOR.

THE design of this short essay, is to shew that the appearances, called tails of comets, arise from a special matter in their atmospheres ; something in a state of repulsion to the sun, and forced off by that luminary, while these bodies are in the lower part of their orbits.

The truth of this notion may appear by observing a little upon the shapes, and the lengths of the tails ; but especially by the bend in those that pass near the sun, in their perihelions.

The tails have always been observed to be direct and strait bodies, excepting the bend in the forementioned circumstance ; and neither one or the other of these have ever been observed swelled on the sides, or in the least degree oval ; which shews that their component particles have no repulsion among themselves ; and, consequently, that they are not formed of any ærial substance. It is well known, that the particles of air have a strong repulsion among themselves, by which they must have rendered these bodies tumid ; as, in case they were only atmospheres repelled, or upon being forced from their attracting centre, they would always spread wide, till they vanished and became invisible. I imagine none will deny that the atmospheres of the celestial bodies are formed of air, that of the sun not excepted ; however, I know of no observation that intimates any repellency between their atmospheres—or between the particles of air and the sun, by which the latter might be imagined to drive away any part of the atmosphere of a comet from the head of it. There is, no doubt, a mutual repulsion between the fixed stars, those other suns, by which they are hindered from approaching one another ; but it is otherwise between them and their systems. The planets are attracted by the sun ; and nothing appears different from this in their atmospheres.

All comets have atmospheres : and yet there are some without apparent tails (as that of 1770) although in a proper situation to shew them. These are properly termed bearded ; the others not so, as particularly those in opposition to the sun, in which point all will appear bearded. Perhaps the nuclei of the former have little of the repulsive matter in their composition ; or rather, they may be of too cold a temperature to volatilize

and diffuse it to the surface of their atmospheres, so as to render it capable of being disengaged by the sun's repulsion. But not to dwell on this; were the tails really the effect of a repulsion of atmospheres, there could be no comets without tails; since all have atmospheres. The conclusion is unavoidable: and this alone might, well enough, be esteemed a sufficient refutation of atmospheric repulsion, and shew the impropriety of arguing for it from the mutual repulsion of electric atmospheres to one another, which is plainly not applicable to ærial atmospheres, they being different substances, and governed by different laws. And to what has been said, we may add, that had the sun such power over these atmospheres, as to drive them into tails, of such lengths as we often see them, it would greatly lessen them round the heads of the comets; whereas these remain the same, if not increasing as they approach the sun. But I am, unawares, entered on the next article, which was to be considered, viz.

That the very great lengths of these bodies ill agree with the notion of their atmospheres being repelled, to return again round their proper centres. The sun's attraction is in proportion to its quantity of matter, and extremely greater than any of the bodies in the system; and its power of repulsion is the same; this being so, whatever substance it can drive from its near adherence to its attracting body, it will of necessity drive quite away, never to return: and every repetition of distance, in the remove, must render this effect if possible more certain; perhaps more of this by and by. I shall only add here, that the appearances, in the extremities of these luminous trains, shew that the solar repulsion does drive them quite off, if what we can perceive may be at all depended on. We see the tails draw out to an evanescent length; or

rather growing thinner and thinner, till quite lost. They appear like a stream of smoke carried by the wind till it vanishes; or we may compare them to the spires of the *aurora borealis*, which ascend and evidently vanish by avolation.

It seems to me that these tails may be seen in the comet's going off and coming on when at a distance, in which the nucleus, or head, is scarcely, if at all, discernible. I had an accidental sight of that of 1744-5, on the 4th or 5th of December preceding its full appearance. The evening remarkably clear, the stars attracted my attention, and dwelling a little on a certain constellation, the eye caught a small white streak, but as soon lost it again; thus a second and a third time, with no better success. My sight then a little fatigued, I could not recover it again; I therefore marked the place, expecting another opportunity; but this not soon happening, it was forgot. Two or three days before christmas, being told a comet appeared, I recurred to the place, and found it very plain to sight, and that it had moved two or three degrees towards the sun. What I perceived before, was only a small streak like a short needle; but the head, as well as the tail, were now both visible enough. I imagine at the first time it was not far within the orbit of Jupiter.

A young gentleman, at Haerlem, discover'd it in the last week of November, but did not, as I know of, give any account how it appeared to him, although probably assisted with glasses, which I had not. Upon which permit me to observe, that it is to be regretted that our observers are so faulty in not giving more circumstantial accounts of what comes under their notice; especially concerning things of which, they are sensible, the world is greatly at a loss: an error by which mankind, more than B

by any thing else, have been kept in ignorance of many things which might have been known ages ago.

At the distance this comet was, when I first saw it, it must have had a very considerable tail, otherwise it would have been invisible. I shall make little use of so imperfect a sight as I had of it, rather taking occasion to mention two or three things which it suggests. One of which is, that there seems to be no more of atmosphere round the heads of comets at greater than lesser distances. Another thing is, the great repulsive force of the sun at that distance, without which no tail could have appeared; for we cannot reasonably suppose that a mere atmospheric repulsion, were it real, would reach the thousandth part of that distance, any more than that electric atmospheres would affect one another at any considerable distances, which they do not. So also, a tail at this distance, is a presumption of a peculiar matter repelled to form the tail, and upon which the whole solar body powerfully acts.

I come now to consider the bend, which I esteem the strongest evidence for the truth of my notion.

The comet of 1680 had, perhaps, the largest bend of any one that has appeared in the course of time. It's revolution, we are told, is 575 years. Sir Isaac informs us, that it passed within one sixth of the diameter of the sun, in it's perihelion. Imagine then what a heat it must suffer, when at more than twenty times that distance it will set any combustibles immediately on fire. But the things here to our purpose are the bend, and the motion of the tail when passing the sun.

The tail was well towards 100,000,000 miles in length; and in wheeling round the sun, must have swept a quarter part of the heavens in one artificial day, in which the

extremity of it moved at least 200,000 miles in a minute of time. This velocity it suddenly received upon it's appulse, and lost it as suddenly on it's recess from the sun. Such was the action, and such the amazing changes of action, which can by no means be accounted for on the hypothesis of atmospheric repulsion. We may contrive, and talk very cleverly of the freedom for motion in a void and the very tractable nature of æria particles, to the least imaginable impulse; and we may be highly delighted with our conclusions from deceitful principles; but nature will not comply with our inventions. particles of air have gravity, and must therefore have force to start them; and, when put in motion in a void, foreign resistance to reduce them to a state of rest again; all reasoning is here to no purpose, unless we allow particles in a state of repulsion to the sun, and capable of a flight, in some degree, similar to the rays of light, and exceeding what we frequently see in the aurora borealis.

Mr. Dale has given us the figure of such a bend as we are considering; and if I remember right, shews it to begin about, or but little below, the middle of the tail, according to sir Isaac's observation on the forementioned comet; and we may suppose he has given it upon good authority. But in other things, which were foreign to the design, the figure is fanciful, too broad and sharp-pointed to agree with constant observation; a fault which writers and designers are too frequently chargeable with, and even in such things as require the greatest accuracy and precision. But it is time to make an end, hoping I have expressed myself so as to be understood, and that the reader is by this time satisfied, that in case of a repulsion of atmospheres, the bend must, according to nature, begin at

the head of the comet, and that such an hypothesis will no ways account for any of the phenomena; while on that of particles, in a state of repulsion to the sun, and constantly passing off from the atmosphere of the comet, there is no difficulty in accounting for all the appearances; particularly that on this principle the bend should, naturally, be at a greater or a less degree of distance from the head of the comet, according to the time the nucleus takes in passing round the sun, and the velocity of the avolating particles. But, since a short space of time may change the direction of the tail, and different degrees of velocity will determine the place of the beginning bend, let it be supposed that these particles are four, seven, or ten minutes in reaching a given distance; the place of the bend will then be, *cæteris manentibus*, as the times inversely.

P. S. The writer did not suppose it necessary to use any accurate calculations; his design being only to give a short and general idea of the subject, agreeable to the laws of nature, which we are acquainted with.



Remarks on the different ideas of mankind, respecting the acceptation of the term, "business."

THERE is not any thing more difficult to define than the meaning of the word business; for, it may be indiscriminately applied to every pursuit in which a man is engaged, whether of an important or trifling nature; whether it relates to the accumulation of property, or the dissipation of time. To acknowledge yourself to be without business indeed, is to divulge that you are a useless member of the creation; and therefore we find that those who have

neither talents nor application adapted to the valuable occupations of life, are in the habit of making their very pleasures the subject of labour, and of magnifying the minute occurrences of the day, into matters "of great pith and moment."

Mankind, in this respect, may, perhaps, be divided into two classes, those who are busy for themselves, which may be with or without profit, and those who are busy for others, which may be with or without invitation. To illustrate this proposition, permit me to delineate some living characters of both classes.

Figit is the most indefatigable merchant in the city. He boards every vessel that arrives in the harbour, though he has no reason to expect a consignment; and is generally at the post-office, as soon as the mail, though he has no reason to expect a letter. He never walks when he is in the streets, nor sits still when he is in a room. In his counting-house, indeed, he dances, perpetually, from desk to desk, to inspect the ordinary entries of the clerks; and if he has but a commission for the purchase of a single barrel of bread, you may trace him into every baker's shop in the town before he has performed it. The loading or unloading of a vessel for ever prevents his being punctual to an engagement; and he once apologized to a lady for delaying her dinner three hours past the appointment, by assuring her that it had been the means of gaining him six-pence on the price of a puncheon of rum. In short, Figit conceives that the commerce of the state depends upon his exertions, and finds more pleasure in the ostentatious hurry of business than in the receipt of its greatest emoluments. He may therefore be ranked with those men who are uselessly busy for themselves, and who think the fatigue of labour is its sweetest consequence,

Of those characters who are busy for others, without deriving emolument from their labours, we may consider Peterkin Grunt, who has been called to the honourable station of a judge. In his official capacity he sits upon the bench punctually every day ; but as he is sensible that wisdom is the great attribute of a judge, and has diligently studied the maxim which says, " he is a wise man who speaks little," Peterkin takes care, like the sagacious owl, to confine his wisdom to his looks, and has never been known to give his opinion in court, but upon the important question of an adjournment. In private life, however, he displays the natural loquaciousness of his disposition, and delivers more law and politics in an hour, than would be sufficient to settle every cause on the docket, and arrange all the principles of a government, which has for so long a time employed and perplexed the federal convention. It is true, that in these respects he seldom agrees with the opinions of lord Coke or mr. Locke ; but it would be as reasonable to expect that a man should be acquainted with a face that he never saw, as that he should understand doctrines, which he never read. It is enough for the peace and fame of Peterkin's life, that though a cypher himself, he has been able to add to the powers of a unit ; and he frequently boasts, with an honest flow of self-approbation, that unless he had been seated at the president's side, the judicial business of the country could not have been transacted.

Amble is the hero of mobs, and a brawling member of clubs and associations. There is no tumult in the street in which he is not busy, and no criminal court in which he does not appear as a party, juror, or witness. If a customer enters his shop, he finds more pleasure in discussing a point of

politics with him, than in selling his wares, and thinks it a greater honour to hold a lantern on the night of an election, than to have commanded at the battle of Brandywine. By his anxiety for the public welfare, he has at length impaired his fortune ; and frequently neglecting his family in order to interfere in the quarrels of his neighbours, he has contracted a perpetual head-ach from the fractures and contusions, bestowed as the reward of his officiousness. Thus, it is as impossible to charge Amble with being idle, as it is to discover either profit or delight in the bustle of his existence.

But of all the employments which are chosen to supply the want of real business, that of dancing attendance at tea-tables, and engaging in the learned debates of female coterie upon a feather or a fan, is the most ridiculous ; yet we find Renaldo, a person of literary talents and information, pursuing this system with as much ardour, as if it were productive of the most substantial blessing. I would not wish to be misunderstood : the society of the ladies is certainly capable of communicating the most refined pleasure, and of elevating the passions to the noblest heights of sentiment ; but female occupations and manners are as unbecoming a man, as the petticoat or the head dress. And mrs. Jolly who engages in all the manly pleasures of the bottle, is not a more disgusting character, than Renaldo, who engages in all the little pleasures of the tea-cup. There are, indeed, some men who seem designed for the performance of those trifling services, which it is the province of the fair sex to impose : but Renaldo is not of that class. Nature has given him a heavy person and a louring aspect, to which the habits of scholastic life have added an embarrassed and ungraceful carriage. It has cost him more pains to learn the Parisian bow, than it did to acquire

the Roman language ; and even at this hour, he cannot contrive to pay a compliment without the assistance of Horace or Ovid. It seems then to be the business of Renaldo's life, to counteract those qualifications which might render him an ornament of society ; and he rests satisfied at the close of every day, with the reflection of having filled a space in Mrs. Prattle's drawing-room, or of having escorted Mrs. Palace, to her home, on the breaking up of a tea-party. With these exemplifications of the position I have stated, I shall close the present letter. In a few days I will perhaps furnish some additional characters and remarks.

HARRY HOGARTH.

Philadelphia, August 27, 1787.



Considerations on the late law of Pennsylvania, for mitigating the severity of the penal code of that state—with satisfactory reasons why its success has not equalled public expectation—and proofs that as yet it has not had a fair trial.

AFTER a new system of any kind, whether it be of law or other nature, hath been adopted and practised upon, a review of its operation and effects, made at certain periods, seems to be proper, in order to judge of the experiment, and to discover the defects, if any, in the contrivance or execution of it : for all the undertakings of mankind are corrected by experience. With this design, I wish to exhibit to the public, the result within the city and county of Philadelphia, of the benevolent act of the general assembly, which was published on the 15th day of September 1786, for amending the penal laws of this state, and rendering punishments less sanguinary ;

passed in pursuance of the 38th and 39th sections of the constitution of Pennsylvania.

As the city and its vicinity are the principal scene of criminality in the commonwealth, a sketch of what has passed under this law, in the city and county of Philadelphia, will best elucidate the subject. The following is therefore taken from a more detailed account, furnished in March last, to a committee of the present general assembly, to which this matter was given in charge, to report thereon to the house.

On inspection of the records of the several courts of criminal jurisdiction, within the city and county, viz. the courts of oyer and terminer, the county sessions of the peace, and the city court, it appeared, that between the enacting of the new penal law in September 1786, and the 25th day of October 1787, (a space which exactly comprehended the proceedings of a year) 98 convictions under the scheme took place. These consisted of a variety of offences, exclusive of rape, arson, and murder, which, together with treason, are still reserved, if any had happened, for capital punishment. Of these 98 persons, there had been 27 pardoned, 17 had broken jail, and completely escaped, others who had got loose, being recovered, and two had died ; so that by lenity of government, and by escapes, nearly one half of the offenders who were brought to justice, had avoided punishment. To ascertain the number of those, who, in the mean time, favoured by the tenderness of prosecutors, want of evidence, non-attendance of witnesses, artful defence of counsel, and mistakes and reluctance of jurors, had eluded justice, is impossible ; but, probably, it surpasses the number of the convicted. This statement shews plainly enough, why the new plan, supposing it otherwise perfect, has not produ-

ced all the good effects expected from it. The present sovereign of Russia, in her instructions to the commissioners appointed in 1769, to frame a new code of laws for the empire, lays down as a principle, that "licentiousness proceeds from neglecting to punish, not from punishing with mildness." If we apply this to the case before us, the reasons why the late act has not been efficient, stare us in the face. The extreme facility with which pardons are obtained, must have invited to crime. Yet it is supposed, that this perversion of authority by gentlemen, whose peculiar business it is "to take care the laws be faithfully executed," has proceeded from the too great indulgence of humane feelings; a deeper insight of the subject, however, would have taught them that the impartial and strict execution of the moderate sentences under this law, would be the truest exercise of mercy.

The next half year, from the 24th of October 1787, till the 24th of March 1788, produced within the city and county 59 more convictions of this nature; besides several re-convictions of the pardoned, and of those who had broken jail, but who were retaken. Of the 59 last mentioned, two had died in prison; three only had been pardoned. For, by this time, so many instances had happened of the immediate return to crime of those forgiven, that this abuse of mercy, had, in some measure, proved its own antidote. Indeed, there can be little doubt, that, if the present moderated scale of penalties, were generally inflicted, pursuant to the respective sentences, offences would diminish. But in order to this, the council must not only forbear interposing, unless in case of evident mistake in the verdict, but the courts of justice must direct strict enquiry concerning every escape of these convicts from their keepers, in order that

we may attain, as nearly as may be, to that "certainty of punishment, which (not the severity of it), is the most powerful restraint of crimes."

To complete this system of punishment, in favour of which, the committee of general assembly reported, it will be requisite, that a new prison particularly for these convicts, be erected in the city of Philadelphia. This should be of size sufficient to afford room for labour within doors. In this house, the condemned might be employed constantly, during the time of hard frost, and of stormy weather, without which the plan must be very imperfect. Here, too, every hardened offender might, during the night, Sundays and other necessary times of relaxation of labour, be shut up in silence, separate from his fellows, and a proper distribution and severance made of the rest, according to their characters; thus preventing the total corruption of young sinners, which will be unavoidable, if the confinement be promiscuous. Hitherto the female criminals, condemned to labour, have been prudently placed in the work-house, where, it is said, their earnings have been equal to the cost of their food and clothes. The place may, perhaps, be too small to separate them, and set them at work properly. In the proposed new prison, the picking of oakum, chipping and rasping of logwood, sawing of marble, and a variety of other labours, might be contrived to fill up the whole time of the convicts; hours of necessary rest and refreshment excepted. Constant work, whilst it pursues and fulfils the sentence of the law, will prevent mischief among the prisoners, and relieve the county of the burden they bring upon it. It is obvious, that all intercourse with the wicked associates of these criminals who are at large, should be prevented by a lofty inclosure, round this building. The county jail, bounding on

Walnut and Sixth streets, admits of too easy opportunity of introducing through the windows, spirituous liquors and other improper articles unseen by the keeper.

In considering the event of this scheme, it should be recollected, that the public, at the time of adopting it, was encumbered by a very considerable number of old offenders, who had been hardened, not reformed, by public whipping; as to some of them, often repeated. That others of these bad men, had passed through the scene of capital conviction and sentence of death, but from the lenient spirit of the times, having escaped the merited suffering, had, as is but too common, acquired a seariness of conscience, and were now prepared for the most flagitious deeds. Some of each of these descriptions, were then in actual confinement; others were at large. The calendar of the county jail, delivered to the justices of oyer and terminer and general jail delivery, on the 10th day of April 1786, gives the names of above sixty convicts for felony and other base crimes, then in custody of the sheriff, of Philadelphia. Of these, some had been in prison between two and three years. Most of them had been corporally punished, as they had severally been sentenced; but they were then detained for their respective fees, which the officers of justice, without prospect of obtaining, declined to remit, because to have remitted these legal dues, would have let loose upon the public a dangerous gang of plunderers. In this manner, from fifty to fourscore wretches, fed at the county charge in idleness, were constantly shut up, corrupting one another.

Upon the passing of the act for commuting corporal inflictions by labour, as above mentioned, an almost general jail delivery took place. The fees of the felons and others, who had been punished, were remit-

ted, with design to accommodate all things to the new plan. Many, who thus procured their release, were soon sent back to prison, charged with new offences—a circumstance little attended to, but which greatly helped to furnish a sudden and large list of criminals under the new law.

Thus, besides unforeseen obstacles, with which this experiment in jurisprudence, has had to struggle—besides the difficulty of finding at once proper labour and proper inspectors, and the want of room within doors to employ the objects of it in bad weather—the plan has been undermined and counteracted by a profusion of pardons, and by an unaccountable number of escapes. If these facts be considered, it will appear, that the new plan has not had fair play. Should pardons be granted, as they have been, under a scheme of punishment, so moderate in its prescriptions, and escapes of the keepers continue to be passed over, without check, that certainty of suffering, aimed at by the devisers of it, and upon which all its energy depends, will not be attained. Our criminal code must become a dead letter, and insidious offenders of the basest kind, together with the sons of high-handed violence and rapine, will stalk openly through the land. The orderly and industrious, surrendered to the unworthy, the idle, and the unprincipled, will be tempted by the impunity of the guilty, to join those, who, forsaking honest exertion, live upon the labour of others.

Supposing the act of 1785 repealed, we should return to the ineffectual laws, which formerly directed our tribunals; to whip the fraudulent, and to hang the robber and housebreaker by night. We know, by experience, that whipping, not exceeding forty stripes, will not avail: and we are not to expect that the rulers, who failed of steadiness,

in permitting the inflictions of labour, to which burglars and robbers have been sentenced, will issue death warrants with necessary strictness upon such offenders; much less upon those who commit smaller crimes, if capital sentences were extended to them, as they are in England.

Yet, supposing the council should do all this, is capital punishment effectual in restraining the commission of crime? If the injured through compassion should not forbear to prosecute—if jurors through compassion should not forget their oaths, and neither acquit the guilty, nor mitigate the offence—and judges through compassion should not respite one half of the convicts, and recommend them to mercy—if all chances of escape could be excluded—yet ought this course to be taken? The great Montesquieu, to shew how unavailable capital punishment is, has instanced in the case of soldiers deserting from an army, and he has shewn that since desertion has been punished with death, the offence has vastly increased. This hath happened, it will be said, because such an outrage on humanity, as the strict execution of this law would produce, has reduced the law to a dead letter: that impunity has encouraged the offence. Be it so; would not the renewal and extending of capital inflictions turn out so among us? But has the constant and strict execution of the sentence of death, in England, in the case of forgery, first begun in 1695, and since gradually extended to almost every species of it, been advantageous? Do not modern instances, such as those of the Perreau's, dr. Dodd, Ryland, &c. &c. shew that it is far from being suppressed, tho' no pardons have, in the mean time, weakened the impression of these severities? This crime, so mischievous where paper credit abounds, has latterly been perpetrated in Eng-

land by men in higher stations than formerly; by such, as, from their connections and circumstances, were seemingly placed above the suspicion of forgery: so little has the severity of punishment restrained from the commission of crime.

Philadelphia, May 12, 1788.



Observations on the management of the female convicts, in the work-house, Philadelphia.

THE judicious management of the female convicts, in the workhouse of this city, under the new penal law, merits great approbation. These women, who entered that prison with dissolute dispositions, equally unwilling and incapable of engaging in any profitable employments, have, by a strict but not cruel superintendence, been gradually reconciled to labour and industry, and, by a patient attention, have been instructed in several useful and ingenious occupations. Besides furnishing coarse linen, and articles of summer wear, for the convicts of the other sex, a very considerable quantity of fine linen has been made for public sale by this unhappy sisterhood, who were before ignorant in every branch of that manufacture. By such means, punishment is directed to its noblest end—the reformation of the offender; who having thus acquired a skill by which an honest livelihood may be obtained, will be under no temptation to return to the paths of vice; and may hereafter make atonement to society for those transgressions, which often proceed from the want of reputable resources, than from the mere depravity of the mind.

Philadelphia, Jan. 3, 1788.

Remarks on the propriety of employing convicts in clearing the navigation of obstructed rivers.

THE punishment of crimes, by forcing the criminals to labour for that community, which they have injured, is certainly a more happy expedient for the prevention of public injuries, than any which has hitherto been attempted. But whether the services of those unhappy people (who have, by our laws, been condemned to the barrow) are made as useful to the state as possible—or whether the mode of employing them, is the best calculated to bring them back to the paths of virtue, or to deter others from the paths of vice—I confess appears to me a matter of some doubt.

The business of the wheelbarrow-men, as they are called, has been generally confined to cleaning certain parts of the city, levelling the fields, &c. They were well employed, but their labours have only benefited a part of the state, to the whole of which their services were due.

The power of making these people beneficial to the state at large, I conceive, rests only with the legislature: to that body, therefore, I beg leave to address these remarks.

The inland navigation of this state ought, in my humble opinion, to be considered by our rulers, as a matter of the greatest moment: and every scheme, proposed for the furtherance of this grand object, ought to be taken into consideration, and, if found good, immediately adopted. Our population increases beyond imagination. Agriculture flourishes: and the productions of the earth have, within a very little time, become immense. Our upper country is a granary, where every thing necessary to life is produced in astonishing quantities; and the farmer would have nothing to wish, could the fruit of his labours receive a value, which

a ready transportation would give them. But, unhappily for him, the streams are blocked up, and the depth of the great river is daily decreasing. The obstructions in the Mohawk can scarcely be more detrimental than they are at present. Those in the Hudson are increasing every moment; notwithstanding the means that are used for their removal—means which might prove successful on a muddy bottom, but which can never fix the fluctuating sand. Some other mode must be adopted, some other way found out, to prevent the desolation of Albany, and to increase the value of the landed property in the upper country; for on the increase of property, depends the increase of revenue, without which, whether we stand alone, or link with others, our government will have no strength. As inland navigation, then, is of consequence to the prosperity of the state, and as the present attempt to deepen the Hudson, will not, in my opinion, succeed—I beg leave, with all due deference, to offer a plan, which, with less expence, will produce the wished effect. I would propose, that the criminals, who have forfeited their liberty to the public, should be collected from every part of the state, and put upon this necessary work; that a number of flat bottomed boats, sufficiently large for the purpose, each with eight oars and a large square sail, should be furnished, in which the culprits, with a master and necessary assistants, should be placed; that these boats should be loaded with stone, from the immense heaps which lie on the western shore of the river, for miles together; that those stones should be carried to the Over-slaugh, or wherever, in its vicinity, the river is filling up, and there, between the islands, which only serve to distract the course of the water, they should be unloaded. The consequence

would be, that the stream, so long used to flow in different channels, being dammed into one, would become more rapid, and its bed be kept clean from those sands, which, while the water had a sluggish, various course, were rolled from one channel to the other.

Independent of the benefit navigation would receive from this plan, those islands between which the dams were laid, would be joined together in a short space, by the vast quantity of sand, accumulated under cover of the dam; and the property, which is now lessened every flood, would be increased.

The unhappy people, who are proposed to put this plan in execution, retired in a certain degree from the world, far from their vicious companions, (the very sight of whom, unpunished, serves but to harden them in guilt) kept to hard and continual labour, under decent but firm masters, would reflect upon their crimes, and resolve, when liberated, to become good members of that society which they had injured.

We are generally apt to imagine those punishments inflicted at a distance, and the extent of which is not fully known, to be much greater than they are. The fancy, ever busy, would paint to those yet undetected in their crimes, the situation of their guilty friends much worse than death; their fears would be alarmed, and stop them in the full career of vice; while, by the present mode of punishing, they see the whole extent of what they have to dread, the sight becomes habitual, and loses all its terrors.

Thus it appears to me, that the punishment of our criminals is not so conducive to the welfare of the state—is not so well calculated to bring back those who have erred—or to prevent the straying of others from the paths of virtue—as in an alteration of the present mode might be expected.

TIMON.

New York, Jan. 13, 1788.

*Observations on the striking advantages resulting from sentencing convicts to hard labour and solitude.**

Hope, near Manchester, March 10, 1787.

I Believe there is now little occasion to impress upon the public sense, the great necessity of a speedy and thorough reformation of our prisons, and the execution of the penitentiary act of the 19th of the present king. The writings of mr. Howard and sir George Paul, and the labours of the late mr. justice Blackstone, and the right honourable William Eden, have produced a general conviction in the minds of all ranks of people, on these great points. It may, however, be of service to point out the success of the scheme of punishment, by solitary imprisonment and hard labour, where it has been tried. I have now before me, “a printed list of prisoners under confinement, and sentenced to hard labour, in the castle, jail, and Bridewell of the county of Oxford; with an account of their earnings, expenses of maintenance, materials for work, clothes, overlooking, &c. from January 23, 1786, to January 17, 1787.

This paper is divided into eleven columns, containing the names of

NOTE.

* *Although this piece, at first view, may appear not to fall within the plan of the Museum, yet the importance of the subject, and the probability that it will, as it ought, attract the serious attention of most, if not all of the legislatures in the union, are presumed to be sufficient apology for the printer's introducing it, with the three preceding speculations. To grow wise by the experience of others, is the province of a select few—and it is to be hoped that America will profit by the wisdom as well as by the errors of her parent:—C.*

the prisoners, their ages, punishments, crimes, when discharged, total earnings, expence of clothes and extra food, expence in county allowance for bread, behaviour, and general remarks.

A single instance will illustrate this table.

“Joseph Parish, aged 19 years, committed to hard labour for four years for a highway robbery, March 10, 1786. His sentence afterwards remitted by his majesty, on account of his good behaviour, to three years and a half. Total earnings, 14l. 10s. 8d. clothes and extra food 6l. 6s. 4d. allowance for bread 3l. 2s. 6d. industrious, now at hard labour.”

The number of prisoners committed in the above period to hard labour was 45; and many of them for seven, four, three, two, and one years, and for great offences. On looking over the columns of offences and general remarks, I observed that 37 are described as industrious. Of many of these, it is further said, that they have been very diligent, and remarkably good; that they had been rewarded, and had whipping and part of their terms remitted by his majesty, [on the recommendation of] the visiting magistrates. Their general account stands thus, and I am credibly informed, that their earnings have been much under-rated.

	£.	s.	d.
Expences for bread	58	18	0
Ditto in clothes and extra feeding	85	1	9½
Overlooking	21	10	0
Materials for work, &c.	12	12	0
	178	1	9½
Total earnings	198	1	11
Total expence	178	1	9½
Balance saved to the county, above every expence whatever	20	0	1½

Five of the best of these convicts were employed as a porter, a mason, a carpenter, (in the new buildings) a taylor, and a cook. The mason earned 10s. a week, and the carpenter as much.

One Moses Hutton, aged 29 years, committed for 12 months, and to be severely whipped, for felony, was so remarkably good, that he was appointed porter, and had the whipping, and half of his time remitted to him by the mercy of the king; and, at his discharge, was rewarded, and completely clothed.

The following N. B. is added to the bottom of the list, “the above report was made at the last epiphany session, and was then ordered to be printed, and to be sent to the lord-lieutenant, the acting magistrates of the county, and foreman of the grand jury, at the next lent assizes. And the justices then present, willing to give every encouragement to the general plan of reform now going on at the castle jail, and to such convicts as shall conduct themselves to the satisfaction and approbation of the committee appointed to superintend the management of the castle jail, unanimously agreed to open an annual subscription, by the magistrates and other gentlemen of the county, for pecuniary rewards on the discharge of industrious prisoners, and for prison charities in general.” (See 19th Geo. III. c. 74. sect. 37, 49, 56.)

This account proves the wisdom and humanity of the mode of punishing felons by solitary imprisonment and hard labour. Its tendency to reformation is evident; many at Oxford, at Wyndham in Norfolk, have been reclaimed; and the product of their labour has more than repaid all the expences of their clothes and food. But this product ought not merely to be estimated as a saving equal to the surplus of the ear-

nings above the expence; because the whole amount of their earnings should be considered as actual gain to the community, which thus derives the great advantage of so much productive labour from a set of men, who would otherwise be lost to their country, as transports, or remain a heavy burden upon it in the hulks or in the wretched jails, in which they have hitherto been confined.

There is nothing in this plan that endangers their health or lives, or adds to the limited and defined circumstances of their sentences. Their separation prevents evil communications, and stops the contagion of villainy. Their food, raiment, and lodging are clean and wholesome. Their labour tends also to preserve their health, and they have the benefit of religious instruction. Yet, a long and strict confinement in a solitary cell, without the society or converse of their fellow creatures, and a perpetual task of hard labour, severely enforced, must be a terrible punishment to these convicts, and exhibit a continued and powerful example to deter others from the crimes for which they suffer.

T. B. BAYLEY.



Observations on silk worms: recommended for publication by the committee of the American academy of arts and sciences, upon agriculture.

THE raising of silk worms, and the manufacture of silk are as practicable in this country as in any other; and, if attended to, may be greatly beneficial to it. With respect to the feeding and management of the worms, it may be the work of children, under the direction of some intelligent person. It has been lately found, that the greater part of their food may be the garden lettuce, on

which, with a certain proportion of mulberry leaves, they will thrive well; but it is not improbable, that lettuce alone would answer. The mulberry tree, however, can be propagated here at pleasure: it is of a quick growth, and large plantations of them might be had in a few years. If by further experiments it should be found, that lettuce alone would answer for the food of these insects, there would be no necessity, in order to an extensive propagation of them, and a proportionable increase of silk, to wait for the growth of such plantations.

The consideration of this subject is recommended to gentlemen and ladies in the country; for whose information the following observations upon it, made by a lady in England, are extracted from the monthly review for December 1786; being taken from the fourth volume of the transactions of the society for encouraging of arts, manufactures, and commerce.

“The breeding of silk worms, with a view to profit in manufactures, was only introduced into France by Henry IV. in the beginning of the sixteenth century, contrary to the advice and opinion of Sully, who often remonstrated with his clear-sighted master against that project, because he deemed it a chimerical undertaking to attempt to rear them in such a cold climate as France. Experience has now sufficiently proved, that the enterprising monarch judged more wisely than the sage and cautious minister; as it is well known that France now produces silk in very considerable quantities. But though France happily succeeded in this hopeless experiment, as it was judged at the time, scarcely an idea seems ever to have been seriously entertained by any one, that it was possible to rear the silk worm with a view to profit in this country; or to establish

the silk manufacture on the produce of Britain. Yet we think the facts ascertained by the ingenious and spirited miss Rhodes, go far to prove that it is not only possible to rear silk worms on the produce of this country, with a view to profit, but that it is even highly probable that they may be here reared with equal, if not with greater advantage than in Italy and other warm countries, where, only, until very lately, it was believed they ever could be bred.

“ That the reader may be enabled to judge for himself in regard to this particular, let him be informed, that our fair experimenter discovered, in the first place, that the eggs may be preserved in a dormant state, in this climate, with the greatest ease, as long as you choose; and that they can be brought to life whenever you incline, during the summer months, by merely exposing them to the rays of the sun; so that there is no danger of their coming before the food provided for them, has been produced, or of their remaining dormant, while it is in perfection.

“ In the second place, she has also found, that in the cool temperature of our summer air, the chrysalis remains so long in a dormant state, that sufficient time is allowed to wind off the silk without killing it: whereas in warm climates, where their revivification is much quicker, there is a necessity of killing the chrysalis, by exposing it to the heat of an oven, for a certain length of time, before the cones are wound off (boiling water is not sufficient to kill it) to prevent them from eating their way through the cone. The silk, by the heat it is thus made to sustain, is considerably damaged, which never needs be done in this country.

“ III. Where it is necessary to kill the chrysalis, in all those cones intended for the best silk, it becomes necessary also to select a sufficient

number of the largest and best cones, that they may be preserved for producing eggs. All these cones, therefore, are destroyed, and the silk of them in a great measure wasted by the holes that the moth eats through the cones when hatched; and thus a great waste is incurred, which with us would be entirely prevented.

“ IV. With a view to lose as little as possible in this way, those who rear silk worms, in warm climates, suffer no more moths to be produced than are sufficient to lay the number of eggs that are barely necessary for keeping up their stock of worms: so that, if any accident happens, either to these eggs, or to the worms, after they are hatched, they must, for that season, lose the whole produce of their silk worms. But as, in England, the eggs of all the moths, without exception, might be preserved, if necessary, without any waste whatever of the silk, it is impossible that those who may here follow this business, should ever be subjected to the inconvenience abovementioned.

“ V. It is found by experience that thunder is extremely prejudicial to the silk worms; so that many millions of them may be killed by a thunder storm, and with them, the silk they ought to have produced, is entirely lost. But as thunder is much more frequent, as well as more violent in warm countries than in England, the loss arising from accidents of this nature must be there much oftener experienced than here; so that our chance of success must be much greater on this account than theirs.

“ From all these considerations, it would seem, that silk worms may be reared in Great Britain, with equal, if not with greater probability of success, than in those countries, where they have been hitherto reared, with a view to profit in manufactures; and this opinion is confirmed by the observations that follow:

“ Miss Rhodes has found that the silk worm can be fed upon lettuce, and kept in perfect good health on that food alone, four for out of five weeks, that it usually exists in the vermicular state; so that it requires only to be fed about one week on mulberry leaves. Now, if it be considered that mulberry trees can bear the climate of Britain perfectly well, so as to produce leaves in as great abundance here during the summer months, as perhaps in any part of the globe, it seems impossible to deny that raw silk can be produced here, in any quantity that might be judged proper, at as low a price, or possibly lower, than in those parts of the world from whence we at present obtain it, should the following system of œconomy, or something like it, be adopted.

“ It was found by experiment, by Miss R. that ten thousand silk-worms consumed, in a day, about one bushel of fresh mulberry leaves. Now, let us, for example, suppose that a plantation of mulberries was made of such an extent, as to yield ten bushels of leaves a day, during four months each year. In this case, it would be proper for the owner to hatch about a hundred thousand eggs, four weeks before the mulberry leaves should have attained their full perfection; the worms to be fed during these four weeks on lettuce. At the end of a week or ten days, or (for the present, say) a fortnight, let another hatching of the same number be made. These would be ready to take the mulberry leaves after the former brood had begun to spin. And if another hatching succeeded these, and so on through the whole season, it is plain, that thus the mulberry plantation, (a sufficient supply of lettuce being always kept up at the same time) could rear in one season, at least eight (it might be sixteen) broods; but we shall call it ten, that is, one million

of worms in a season. Whereas, in the way they are at present managed in Italy, that plantation could have subsisted no more than one hundred thousand; because, in as far as we can learn, the natives of these countries never have been in the practice of trying to preserve the eggs beyond the time the natural heat of the climate produces them; so that the whole brood comes into life at one time; and that number never can exceed that which their food is capable to sustain at once, which, by this supposition, was a hundred thousand.

“ We are now also brought to see of what importance it is to be able to preserve an inexhaustible store of eggs, without any expence, because these are always in readiness to be hatched in any quantities that the supply of food may indicate to be necessary: and in case of the destruction of any part of the brood by thunder, or any other accident, the loss could be speedily retrieved, by hatching a new brood to supply the place.

“ We may also observe, that, considered as a manufacture, calculate to give employment to women and children, many would be the advantages from rearing them in successive broods, as is here proposed for Great Britain, in comparison of having the whole at once, as in other countries. In the first way constant employment would be given for the necessary hands, for many months, without any extraordinary hurry at one time, the several broods coming in regular succession; so that the cones of one brood would just be finished, when another was ready to begin: whereas in the other case, all the work comes only at one time which then occasions a hurry,—and idleness afterwards must ensue.

“ We have enlarged a little on this important article, with a view to bring the subject as generally as possible

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William Erving, esq.
secretary to the agricultural society.

Letter on the advantages of introducing the use of small beer generally into the country. Addressed by John Beale Bordley, esq. to the Philadelphia society for promoting agriculture and rural affairs—and published by their order.

Gentlemen,

YOUR design comprehending whatever concerns the interest or œconomy of the American farmer, a paper which recommends to him any practice successfully established in other countries, is not improperly addressed to you. The practice I mean, is that of brewing malt-beer, which has so generally obtained among the farmers in England.

Spirituous liquors have been found as fatal to virtue as to health; and, in every country, the free use of them among the common people has destroyed the faculties of both soul and body. Any proposal, then, which has for its object a change of a destructive beverage, for a delicious and wholesome drink, is entitled to a favourable reception, and is equally worthy of the regard of our rulers and ministers of religion: for the state has an interest in the vigour and strength of its people; and religion subsists but to little purpose without morals.

When it is a fact, generally admitted, that the common use of malt-beer is a promoter of health and vigour in the people of the northern nations of Europe, and that the farmers in England brew their own beer, we may well believe that to introduce the practice here, would be an important good to the people of this country also; especially as the American farmer would thereby be freed from the necessity of expending his money for foreign spirits, which every serious person sees with sorrow is the canker of health and of happiness in many families in this country.

It is easy to raise objections:—it is manly to overcome difficulties. In the present case, there is but one difficulty imagined:—"We cannot get malt." This is an obstacle easily to be surmounted: it is in the power of our legislators to introduce malt for general use, throughout the states, in a short time; whereas, if it be left to chance, or to the example or exhortations of individuals, the acquisition is probably some hundred years distant.

At the commencement of the revolution war, it struck me, that the brewing of beer at home ought to be a *sine qua non* among farmers here, as well as in Europe; and I was the more confirmed in this opinion, when I perceived, from my own little practice, that the knowledge of maling and brewing was so easily acquired, as to become familiar to my common servants: hence it is evident to me, that any person may readily learn both how to malt, and how to brew. But, there are reasons why here, as in England, it is best that the farmer should buy the malt he wants. That he may do this, malt must previously be introduced somewhere within his reach: and to bring that about, it ought in my humble opinion to be taken up, first by the people of the county desiring it; who will apply to their general assembly, for a malt-work to be erected at the expence and for the use of the county, under proper regulations, adapted to the design.

I have thought of a scheme of such a county malt-work, and of principles and regulations by which it may be conducted to the best purpose; in the execution whereof, the expence need not be great, and cannot far, if at all, exceed the income of it. The convenience of such a county work will render the cost of malt less in this way to the farmer, than if he made it at home; nor need

he expend his cash about it, as an exchange of malt for barley will be preferred by the malster. Whatever shall be gained in the business, is to be carried to the credit of the county. It is hoped there would be some gain; because in the beer countries of Europe, most of their malt is purchased from persons who carry on malt works at their private expence; which strongly implies a gain on the business. Some malsters exchange malt for barley, bushel for bushel, for their profit:—but it is probable the honest malster would find his advantage from it rather small. There is a practice by others of blowing up malt, in which case measure for measure may give sufficient income. On the other hand, where (as I have known practised) twelve pence more-over is taken, there the malster gains immoderately; or else he malts imperfectly, to render such addition necessary for giving him a sufficient profit.

Under such a public work, every person of the county, from the lowest tenant to the greatest farmer, who shall grow a few bushels of barley, can have malt without applying cash: he only carries his bags of barley to the work, and returns with them full of malt: the brewing it into beer to his own fancy soon becomes familiar, and it will be pleasing to his good wife and family. Until the farmer shall raise hops, beerhound will be a wholesome substitute. This drink is more certainly to be acquired than cyder; barley being hardy against every enemy to grain whilst growing, except water holding grounds. So shall every farmer of the county, adopting the design, be independent of the caterpillar and other usual enemies to the apple, and also independent of foreign countries, for a wholesome home-brewed drink at his own command!

From the experience of several

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harvests, in which a light beer was the only drink of the people, excepting water, rum being totally excluded, beer proved to be most satisfactory, the most profitable and wholesome liquor that my people have ever had at their harvest: they every way prefer it. It is pleasing to see how much more chearfully, steadily, and orderly they go through the whole harvest, than they did when rum was used—that quick, wildfire cordial, which so hastily raises the people up to excess, and often disables them for future reaping for days, and even entire harvests. I have only further to observe, that beer is the harvest drink in the northern countries of Europe, generally, as I am informed.

With hearty inclinations to second the designs and endeavours of your society in promoting the happiness of American husbandmen, I am, gentlemen, your friend, B.

Maryland, Jan. 14, 1786.



To the editor of the American Museum.

THE following account of the palma christi, is communicated to the royal society of London, in a letter to sir Joseph Banks, P. R. S. from dr. Simmons. It is in “an account of medical plants growing in Jamaica”—by William Wright, M. D. F. R. S. and of the royal college of physicians and royal society of Edinburgh. As the palma christi grows very luxuriantly in our climate, you are requested to devote a page or two of your useful repository to this article: it has been cultivated by many gentlemen of this state in their gardens, as a rare plant; having been introduced into Pennsylvania but a few years before the revolution. I have frequently seen the

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plant in our gardens : it appears to be hardy ; and the cultivation of it requires very little attention, provided the seed be sown in a light, rich soil. The propagation of this valuable plant in these states well deserves the notice and care of our farming gentlemen. W. B.

Account of the palma christi, or tree that produces the castor oil nut.

THIS tree is of speedy growth ; as, in one year, it arrives at its full height, which seldom exceeds twenty feet. The trunk is subligneous ; the pith is large ; the leaves broad and palmated ; the flower spike is simple, and thickly set with yellow blossoms in the shape of a cone ; the capsules are triangular and prickly, containing three smooth grey mottled seeds.

When the bunches begin to turn black, they are gathered, dried in the sun, and the seeds picked out. They are afterwards put up for use, as wanted, or for exportation.

Castor oil is obtained either by expression or by decoction. The first method is practised in England ; the latter in Jamaica. It is common first to parch the nuts or seeds in an iron pot over the fire : but this gives the oil an empyreumatic taste, smell, and colour ; and it is best prepared in this manner :

A large iron pot or boiler is first prepared, and half filled with water. The nuts are then beaten in parcels, in deep wooden mortars, and after a quantity is beaten, it is thrown into the iron vessel. The fire is then lighted, and the liquor is gently boiled for two hours, and kept constantly stirred. About this time, the oil begins to separate, and swims on the top, mixed with a white froth, and is skimmed off, till no more rises. The skimmings are heated in a small iron pot, and strained through a cloth.

When cold, it is put up in jars or bottles for use.

Castor oil, thus made, is clear and well flavoured ; and, if put into proper bottles, will keep sweet for years.

The expressed castor oil soon turns rancid, because the mucilaginous and acrid parts of the nut are squeezed out with the oil. On this account, I give the preference to well prepared oil by decoction.

An English gallon of the seeds yields about two pounds of oil, which is a great proportion.

Before the disturbances in America, the planters imported train oil for lamps and other purposes about sugar-works. It is now found that the castor oil can be procured as cheap as the fish oil of America ; it burns clearer, and has not any offensive smell. This oil, too, is fit for all the purposes of the painter, or for the apothecary, in ointments and plaisters.

As a medicine, it purges without stimulus ; and is so mild as to be given to infants soon after birth, to purge off the meconium. All oils are noxious to insects : but the castor oil kills and expels them. It is generally given as a purge after using the cabbage bark some days.

In constipation and belly-ach, this oil is used with remarkable success. It sits well on the stomach, allays the spasm, and brings about a plentiful evacuation by stool, especially if at the same time fomentations, or the warm bath, are used.

Belly-ach is at present less frequent in Jamaica than formerly, owing to several causes. The inhabitants, in general, live better and drink better liquors ; but the excessive drinking of new rum still makes it frequent amongst soldiers, sailors, and the lower order of white people. I have known it happen too from visceral obstructions after intermittents, or March fevers, in Jamaica.

Laws made in the dominion of New Haven, at its first settlement.

THE governor and magistrates, convened in general assembly, are the supreme power under God of this independent dominion.

From the determination of the assembly no appeal shall be made.

The governor is amenable to the voice of the people.

The governor shall have a single vote in determining any question, except a casting vote, when the assembly shall be equally divided.

The assembly of the people shall not be dismissed by the governor, but shall dismiss itself.

Conspiracy against this dominion shall be punished with death.

Whosoever says there is a power and jurisdiction above and over this dominion, shall suffer death and loss of property.

Whoever attempts to change or overturn this dominion, shall suffer death.

The judges shall determine controversies without a jury.

No one shall be a freeman, or give a vote, unless he be converted, and a member in full communion of one of the churches allowed in this dominion.

Each freeman shall swear by the blessed God to bear true allegiance to this dominion, and that Jesus is the only king.

No quaker or dissenter from the established worship of this dominion, shall be allowed to give a vote for the election of magistrates, or any officer.

No food or lodging shall be offered to a quaker, Adamite, or other heretic.

If any person turns quaker, he shall be banished, and not suffered to return, but on pain of death.

No priest shall abide in the dominion; he shall be banished; and suffer death on his return.

Priests may be seized by one without a warrant.

No one to cross a river but with an authorized ferryman.

No one shall run on the sabbath day, or walk in his garden, or elsewhere, except reverently to and from meeting.

No one shall travel, cook victuals, make beds, sweep house, cut hair, or shave, on sabbath day.

No woman shall kiss her children on the sabbath or fasting day.

The sabbath shall begin at sunset on Saturday.

To pick an ear of corn growing in a neighbour's garden, shall be deemed theft.

A person accused of trespass in the night, shall be judged guilty, unless he clear himself by his oath.

When it appears that an accused has confederates, and he refuses to discover them, he may be racked.

None shall buy or sell lands without permission of the selectmen.

A drunkard shall have a master appointed by the selectmen, who are to debar him from the liberty of buying and selling.

Whosoever publishes a lie to the prejudice of his neighbour, shall be set in the stocks, or be whipped ten stripes.

No minister shall keep a school.

Every rateable person, who refuses to pay his proportion to support the minister of the town or parish, shall be fined by the court 2l. and 4l. every quarter, until he or she pay the rate to the minister.

Menstealers shall suffer death.

Whosoever wears clothes trimmed with gold, silver, or bonelace, above 2s. per yard, shall be presented by the grand jurors; and the selectmen shall tax the offender at 3ool. estate.

A debtor in prison, swearing he has no estate, shall be let out, and sold to make satisfaction.

Whosoever sets a fire in the woods,

and it burns a house, shall suffer death : and persons suspected of this crime shall be imprisoned without benefit of bail.

Whosoever brings cards or dice into this dominion, shall pay a fine of five pounds.

No one shall read common prayer books, keep Christmas or set days, make minced pies, dance, play cards, or play on any instrument of music, except the drum, trumpet, and Jewsharp.

No gospel minister shall join people in marriage ; the magistrates only shall join them in marriage, as they may do it with less scandal to Christ's church.

When parents refuse their children convenient marriages, the magistrate shall determine the point.

The selectmen, on finding children ignorant, may take them away from their parents, and put them into better hands, at the expence of their parents.

Fornication shall be punished by compelling marriage, or as the court shall think proper.

Adultery shall be punished with death.

A man that strikes his wife, shall pay a fine of ten pounds.

A woman that strikes her husband, shall be punished as the court directs.

A wife shall be deemed good evidence against her husband.

No man shall court a maid in person, or by letter, without first obtaining consent of her parents : 5*l.* penalty for the first offence ; 10*l.* for the second ; and for the third, imprisonment during the pleasure of the court.

Married persons must live together, or be imprisoned.

Every male shall have his hair cut round according to a cap.

N O T E.

The above laws were originally printed on blue paper, on which account they were called "blue laws."

*Peter Prejudice's complaint of the taylor, who, instead of mending his old breeches, made him a new pair. **

I Some time since sent a pair of old breeches to a taylor, in order to have them patched ; as the breaches, both in front and rear, were very numerous, I was obliged to purchase a considerable quantity of cloth wherewith to mend them. Well, sir, what do you think the taylor has had the assurance to do ? Why, after detaining my breeches upwards of four months, he has presumed to return them unpatched, and has also sent a new pair, along with them, and a message, "that upon examining the old pair he had found them so rotten, that they were not worth mending, nor could it be easily done ; that he had also found that the cloth sent for that purpose, was sufficient to make an entire new pair, much better than the old ones had ever been, which he had done accordingly, and hoped for my approbation of his conduct." He added moreover, "that if upon trial, they should happen to pinch me in any part, he had left a sufficient space for outlets at every seam."

Oh height of insult ! said I, on receiving this arrogant message ; what has this fellow done ! a conspiracy ! a conspiracy ! as sure as I'm alive, the traitor, his journeymen, and apprentices have meditated the ruin of my old breeches, and conspired against the liberty of my thighs, knees, and loins, which they have insidiously attempted to confine and cramp by

N O T E.

* For the information of European readers, it may be necessary to mention that the old breeches allude to the old articles of confederation—the quantity of cloth to the powers granted the late convention, &c. &c.—C.

palming this "gilded trap," the new breeches, on me: "curse on the villains!" they have conspired to lay restraints upon my free-born members, which are utterly incompatible with our republican form of government! here indignation choked my utterance. My dearly beloved spouse and my little children were all gathered about me by this time, to know the cause of my anger. It was, however, a considerable while before the boiling madness of my rage was sufficiently calmed for me to give them the information they desired; but my heat being somewhat allayed, I at length deigned to answer their interrogatories.

Well, my dear, (said my sweet partner) I think you are under many obligations to our good neighbour the taylor, who has rendered you very important services on former occasions; and has certainly consulted your interest in this business; for my part, I highly approve of his conduct; and am pleased that he has made you these pretty new *small clothes* (for she does not like to say *breeches*) to hide your nakedness, and defend you from the inclemency of the weather. Sure you know how you have been laughed at, wherever you went, this long time past on account of your old pair, which the neighbours all say, are no better than an Indian's breech-clout; I protest my own modesty has been often put to the blush by the holes in that plaguy old pair. My lovely tormentor was about to proceed in her condemnation of the old pair, and her praises of the new—Hold! hold! said I, let us reason the matter fairly. In the first place, he has disobeyed my orders, which were only that he should repair the old breeches. But has he not made a new pair much preferable to the old? By no means, I replied; these cursed new breeches would utterly ruin me; they are calculated to enslave my thighs,

to confine my waist, and totally to destroy the liberty of my knees, by buttoning tightly around them: they will also render a considerable part of my hose totally useless, by buckling below my knees; nor is this all, they will imprison my femoral parts, nor suffer them to enjoy fresh air as the old ones do; to be brief, they are *too long* and *too short*, *too strait* and *too wide*, they would *pinch me in all parts*, and *fit me in none*.

Methinks you reason very strangely, my love (replied my solicitous advocate for the new breeches, who was now joined by all the children): your argument, against being under the restraint and confinement of clothes, is only calculated for a circle of savages, and can never have any weight among civilized and social beings; your objection to the want of breaches in the new pair, for admission of fresh air, is an excellent argument in their favour, and shews that they are well calculated to screen you from the inclemency of the seasons; your concluding objections are so inconsistent and contradictory, that they fall to the ground without any comment. Further, continued she, if they have faults, you know the taylor says they can be easily amended; would not you do well, therefore, to put them on, in order to ascertain their faults truly, and I shall have no objection to the necessary alterations being made in them?

No, no, said I, "don't think to catch old birds with chaff." I'm determined never to draw them on, unless the amendments shall have been first made. Here again I was replied to—how in the name of goodness, said she, can you undertake to have amendments made, before you know that the parts you would wish to have amended, are indeed faulty! By such preposterous doings, you might spoil their best parts; but would have no

tolerable chance of even amending one fault; therefore, I beg you may first try them on, that you may be enabled to discover their faults with precision. Do, papa, do try on your new breeches, exclaimed the children with one voice.

Hush! hush! said I once more; I believe the woman and children are all crazy! Do you think I am fool enough to be gulled thus! If I should put them on, how shall I be able to get them off again? I have no security that they will not cling to my skin, tear away my flesh, break my bones, and broil my marrow, like Hercules's poisoned shirt, which insidiously destroyed him. And all this must be borne, without the liberty of even remonstrating against the tyranny of these accursed "consolidating" breeches. I say consolidating; for they are evidently calculated to supersede the use of every other garment; or at least to "melt them all down into one" general garment; and the taylor certainly intended this to be the case. Do they not already exhibit a specimen of their despotism, by being framed so as to "lord it over" a considerable part of my stockings and shirt? And is it not more than probable, that they would, very speedily, encroach upon the prerogative of all my clothes; nay, that they would even extend their sway to my head, and, by closing my mouth, prevent me from expostulating against my "cruel task-masters?" With these over my face, for a mask, I should appear no less ridiculous, than a modern fine lady with her head in a calash, or in a fashionable bonnet.

Here the whole family burst into laughter, and the dispute ended for that time. I have reason to expect another attack on the same score shortly; for my wife is exceedingly fond of the new breeches, and is supported by all my neighbours in

her controversies with me on this subject. As I am nearly exhausted, I will be much obliged to any of your correspondents who will be so condescending as to favour me with a fresh supply of arguments, sufficient to repel those of my spouse in our next rencontre.

PETER PREJUDICE.



Objections to the proposed plan of government for the united states, on genuine principles.

AT a meeting of the wheelbarrow society, in the prison-yard, Philadelphia, February the 8th, 1788, present fifty-eight members; JEM. DORDAN in the chair:

After mature discussion, the society unanimously agreed in the following FUNDAMENTAL PRINCIPLES.

1st. Pure natural liberty is the right of every man to do what he pleases, *without controul*, and to possess, *without retribution*, whatever he can acquire by *valour* or *address*.

2d. States or sovereign powers are as individuals in a state of nature; and therefore true political liberty, or the liberty of a state, as a body politic, is the right of that state, or of those who are in the possession of the sovereignty thereof, to do such things, and enact such laws, as may be thought conducive to the advancement of the powers and interests of that state, or of the government thereof, uncontrouled by the artificial system of restraints; known by the name of the laws of nations.

3d. All systems of government, whether operating on states or on individuals, although ostensibly formed and specially declared to be for the establishment of general justice and of general good, are, in fact, systems of coercion, restraint, and oppression, and ought to be abhorred by the true

sons of freedom, as invasions and abridgments of their natural rights.

4th. Whereas, in the present imperfect state of things, true natural liberty, as defined in our first fundamental principle, cannot be universally enjoyed, necessity inforces a submission to what is called government, under some form or other.

5th. According to the foregoing principles, that form of government is the best, which contains the fewest restraints, and leaves in the hands of the governed the greatest portion of natural liberty, and the fullest scope for the exercise of personal prowess and natural ingenuity; it being demonstrable, that if the component parts of any society are left free, and become, *by any means*, rich and happy, the whole of that society shall be free, rich, and happy.

6th. The worst of all possible governments is that, which, by the vigorous operation of general laws, and a complication of internal checks, restraints, and regulations, prevents individual states or persons from securing their separate interests in their own way; most wickedly sacrificing the emolument of individuals to what is called the glory and prosperity of the whole.

These fundamental principles being established, the plan of government proposed by the late general convention for the united states was taken up, considered by paragraphs, and compared with the doctrines laid down; and after some debate, the following resolutions were unanimously adopted, viz.

1st. Resolved, that the constitution proposed for the united states, is a consolidated government, pregnant with the seeds of coercion and restraint, and therefore a system of tyranny and oppression.

2d. Resolved, that under such a government, neither states nor individuals can do or refuse to do what they

please, in all cases, which is a direct infringement of the natural liberty of both, as defined in our first fundamental principle.

3d. Resolved, that under such a government, men of education, abilities, and property, commonly called *the well born*, will be the most likely to get into places of power and trust, to the exclusion of a large majority of a contrary description.

4th. Resolved, that as this constitution most arbitrarily and inhumanly prohibits the emission of paper money, and other resources, by which the unfortunate debtor may throw off the discouraging burden of his obligations, it ought to be considered, as in fact it is, a system of tyranny and oppression, compelling citizens in many instances to do things extremely disagreeable, and contrary to their interest.

5th. Resolved, that under such a government, the industrious and wealthy may enjoy their property in security, to the great injury of those who have no property at all.

6th. Resolved, that under such a government there will be no encouragement for gentlemen of adventure and address, to procure subsistence and wealth by extraordinary modes of acquirement, because what is called the vigour of law will pervade the whole union.

7th. Resolved, that the government proposed, is consonant with our sixth fundamental principle, and the worst of all possible governments; and therefore,

8th. Resolved, that the members of the late general convention, who framed, voted for, and recommended this plan of government, and all state conventions, who have, or shall hereafter adopt and ratify the same, and all those individuals, who, by word of mouth, by writing and publishing, or by any other means, shall express their approbation of the said infa-

mous constitution, are, and ought to be considered by all the true sons of liberty, as demagogues, aristocratics, conspirators, traitors, tyrants, and enemies of the natural rights of mankind.

9th. Resolved, that as we are the most numerous and respectable body that have as yet combined, formally to avow and publish a disapprobation of this new constitution, it is fit and proper that we should be regularly organized, that other worthy malcontents, in this and the other states, may, by association or election, be annexed to our community, and so make up a union of strength, to oppose the establishment of this tyrannical government: therefore,

10th. Resolved, that we will now proceed to the election of a president, vice-president, and secretary.

Whereupon, the ballots being fairly taken and counted, stood as follow:

For the PRESIDENTSHIP.

For the author of the pieces signed		
CENTINEL,	-	51 votes.
For Jem. Doran,	-	5
For Arthur M'Garity,	-	2

VICE-PRESIDENT.

For L—— M—— esq. of		
Maryland,	-	47 votes.
For Daniel Cronan,	-	8
For Pat. Dalton,	-	3

SECRETARY.

For the author of the pieces		
signed Philadelphiensis,		30 votes.
For Kit. Carbery,		28

The following members were then appointed a committee of correspondence, viz. Jem. Doran, Arthur M'Garity, John Doughty, Pat. Dalton, Daniel Cronan, James Bulger, and Kit. Carbery, to hold communication with the late adherents of general Shays in the state of Massachusetts, and with other worthy opposers in the several states.

The society directed that these

their proceedings should be made public; and then resumed their daily occupation of cleaning the streets and common sewers.



Ne futor ultra crepidam.—Cobler, stick to your last.

I Was led to the following reflections, by accidentally falling in company, some evening since, with a number of characters (chiefly mechanics) at an ale-house, who were making absurd comments on the constitution proposed by the general convention; which convention was composed of the greatest and most enlightened characters in this country. It must be considered, that government is a very abstruse science, and political disquisition a very arduous task, far beyond the reach of common capacities; and that no men, but those who have had a liberal education, and have time to study, can possibly be competent to such an important matter, as the framing a government for such an extensive country, as is comprehended within the united states. Whenever men of neither abilities or education, presume to meddle with such matters as are above the reach of their knowledge or abilities, they will find themselves out of their proper sphere.

The blacksmith will find that he had better attend to his hammer and anvil, and hammer out hob-nails, for country hoof, than concern himself with affairs of state; should he be weak enough to suppose that he has abilities equal to such an undertaking, he will find, that there is a material difference, between welding together two pieces of steel or iron, and that of uniting heterogeneous and jarring interests, so as to make them productive of the public good.

The mariner may very well un-

understand how to take an observation, and navigate his ship; but he cannot possibly be acquainted with every point of the political compass, or so to steer the ship of state, as to avoid the hidden and dangerous rocks and shelves, that may lie in the way: and whenever he makes the attempt, he will undoubtedly find himself out of his latitude.

The distiller, brewer, and baker, may be perfectly well acquainted with the principles of fermentation, and how to regulate and check the same, so as to answer their particular purposes: but they must be entirely ignorant of the laws and means that will be necessary to prevent a dangerous fermentation in the community, or what steps it may be necessary to take, to check such fermentation, when excited.

The farmer may have a sufficiency of knowledge to guide and govern a plough, and team; and understand the best method to thrash his grain: but he must be incompetent to the great purpose of guiding the machinery of the state, or to suggest the best and most effectual method, to thrash the enemies of his country.

The carpenter may be a perfect master of his trade, and understand the rules of architecture; he may frame an edifice, complete in all its parts, and sufficiently strong to secure the proprietor from the attempts of the midnight robber: but he will be totally ignorant, how to frame laws for the security of society, so as to prevent the artful and designing from preying upon the ignorant and innocent.

The miller may be a complete artist, in his profession, and know how to regulate every thing appertaining to his mill; he may understand extremely well, how to separate the flour from the bran; but he cannot possibly be master of the address, that will be necessary, to distinguish the

wheat from the chaff, in the choice of officers, to fill the different departments in the state.

The clock and watch-maker may know very well how to regulate the wheels, and other movements of a clock or watch; but will be ignorant of the necessary art, how to regulate the complex machinery of government, and so to dispose the different wheels, as to prevent their interfering with, and bearing too hard on each other.

The mason may be an excellent workman, and understand how to lay the foundation of an house or a wall properly: but he will be at a loss how to determine what base will be necessary on which such a superstructure as government should be erected.

The saddler may be a proficient in his business, and may know what kind of curb is proper to restrain an unruly and restive horse: but he cannot possibly be a judge what laws or curbs will be proper and necessary to restrain the unruly passions of men, so as to prevent their injuring one another.

The turner may be a very expert artizan: but he cannot possibly be acquainted with all the turns and windings, that are used by bad men to evade the laws, and escape the punishment which they justly deserve.

The cooper may know extremely well, how to stop the flaws and worm holes in a cask, and make it so tight as to hold water, rum, or any other liquor: but he will be much puzzled to stop the flaws, and worm holes in a law, so as to prevent its operating, either to the injury of individuals, or the government.

The barber may know very well how to make a wig, to suit either the priest, physician, or gentleman of the long-robe, or how to shave his customer with dexterity: but whenever he attempts to meddle with affairs of state, he will find that his razors

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have lost their edge, and that he is himself completely in the luds.

If this production should operate in such a manner, as to prevent people's neglecting their business, and meddling with public matters, beyond their capacities, it will be a sufficient compensation to the writer, who has no other object in view, than that of confining every man within his proper sphere. HONESTUS.



Charge of his honour the mayor of New York, delivered to the grand jury at the opening of the general sessions of the peace, for the city and county of New York, May 6, 1788.

Gentlemen of the grand jury,

THIS city, since the restoration of peace, hath been eminently distinguished for order and tranquility—a blessing which can only accompany reverence for the laws. Much is it to be lamented, that her reputation has been so greatly sullied by the late tumultuous and dangerous riot.*

Those, who gave the provocation, have much to answer for, and deserve the odium under which they have fallen. Their misconduct cannot be palliated, by alleging that it was necessary, as a means of improvement in a useful science; since it is acknowledged that a few subjects are sufficient for all the purposes of instruction; and that those might have been obtained without offence. Nor is it a justification, that no injury can be done to an inanimate corpse mouldering into dust. We are to consider its effects with regard to society.

N O T E.

* For the rise and particulars of this riot; see *American Museum*, Vol. III. page 389.

Men seem prompted by their very nature to an earnest desire that their deceased friends may be decently interred, and rest undisturbed in the grave. This is a sentiment which equally influences the enlightened citizen and the untutored savage. Who, indeed, without grief and indignation, could bear to have a tender connexion torn from the tomb, and exposed to the process of dissection? To say that it would not be felt as an injury, must bespeak an ignorance of the human heart. It is a gross trespass upon the rights of those to whom the cemetery belongs, and actionable.

With respect to the public, as it has a direct tendency to excite animosity, discontent, and revenge—and as it is indecent and contrary to those good manners, which are essential to the well-being of every community, it is criminal, and punishable in the ordinary course of justice.

To such a tribunal, it was the duty of the people to have submitted the redress of this grievance.

But, by rushing into riot and violence, and obstinately persisting to the last extremity, even to occasion the shedding of blood, they have committed an offence, far more serious and alarming than that of which they complained—an offence striking at the very foundation of all government and security. To every civilized country, such an event would be a reproach: but how much more so to a land of liberty, where all power and office are derived from the people themselves—where the law, and not the will of the rulers, is supreme—and where it is emphatically the government of the very people, who attempt to destroy its influence, and render it contemptible?

If there should be no subordination or obedience, and no energy, or public virtue to vindicate and main-

tain rightful authority, what would avail the high privileges, for which, at every hazard, we have successfully contended? What the best constitution, or the most excellent system of laws, though administered with the utmost purity? If, on every gust of passion, individuals should be suffered to recur to acts of riot and revenge, all the blessings we enjoy, must become precarious; every man in his turn might fall a victim to blind rage; and innocence itself, as we have lately seen, afford no protection. Besides, our maritime situation ought to rouse us to a peculiar sense of the danger of such convulsions. As the seat of an extensive commerce, we are continually exposed to an influx of loose strangers; who, having nothing to lose, eagerly join the throng, are foremost in mischief, and lead on to every act of desperation, without scruple or regret.

We are, therefore, under the highest obligations to set our faces against such excesses, and resolutely restrain them by all the means in our power.

Wherever licentiousness becomes habitual, that society must swiftly hasten to a miserable dissolution.

These are serious reflections, but they are founded in experience: that it should ever be necessary to inculcate them from this bench, must give pain to all who love their country, or wish for its honour and stability.

An indiscriminate censure of the citizens at large, is not intended. It would be unjust. Great numbers, amidst these commotions, did their duty, and deserve praise. To those, who, shutting their ears against the most pathetic remonstrances, in open defiance of the magistrates, preferred the gratification of an extravagant resentment to the public good, they are but too applicable.

You, gentlemen, may probably think yourselves relieved from the

weight of investigating these offences. They have already employed the attention of a respectable grand jury, under the direction of the supreme court, which is just risen, and a diffidence of their discernment or diligence, would be an ill return for the great pains they have exerted in a faithful execution of their office. I cannot therefore charge them as express subjects for your enquiry.

The principal object which I have in view, is to introduce an earnest recommendation that you will unite with your magistrates in enforcing on men, misguided by unruly passions, the indispensable necessity of a more prudent, temperate, and dutiful conduct, that such outrages may never be reiterated, but remembered with abhorrence, and serve as an example for their admonition; that medical students, who are culpable, may be taught to refrain from a practice which is in itself penal, and, in the public estimation, repugnant to humanity; and be satisfied that experiments, only to be obtained by drawing down the hatred and contempt of their fellow citizens, are inconsistent with their true interest, as they are disgraceful to a liberal profession; that all may be convinced of the extreme danger and folly of arrogating, or suffering others to arrogate the office of avengers; and that it is their dearest privilege, that it belongs only to the magistrate to punish offences, according to the known rules of law.

They will then entertain sentiments worthy of the citizens of a free republic. From principle, they will become watchful for the public peace, seeing how intimately it is connected with the common safety and their own preservation; they will become strenuous supporters of the laws, as their best birth-right, and they will wisely refer their wrongs to the tribunals of justice, appointed

to redress the injured, and punish the guilty.

A complaint of a breach of the privileges of the minister of the united netherlands, residing in this city, hath been officially communicated to me, with a request that proper measures may be taken for his satisfaction.

As this is a new case, arising from our elevation to the rank of a sovereign republic, it will require explanation.

The law of nations, which regulates the conduct of independent states towards each other, protects foreign ministers and their retinue and domestics from arrest, even for just debts, and on processes otherwise legal. Their houses are also rendered inviolable. This immunity is founded on reason: for whatever is subject to the controul of laws, is dependent on the power by which they were ordained: but an ambassador ought to be independent of every power but that which he represents. It is easy to perceive, that on any other principle, the free exercise of his functions might be controuled, and his mission rendered useless.

In many of the nations of Europe, particular judicatories are appointed to enforce in a summary way, and by severe penalties, the law of nations in this respect. Until the reign of queen Anne, we find no instance recorded in England of the violation of this privilege. At that period, the ambassador of Peter the great, czar of Muscovy, was arrested for a debt. The affront was highly resented, the czar requiring that the sheriff and all concerned in the arrest, should be punished with instant death. This demand could not but be rejected: it was not only sanguinary in itself, but there was no law to justify a compliance.

On this occasion, effectually to prevent such aggressions for the future,

it was enacted by the statute of the 7th Anne, ch. 12th, that all persons concerned in any process, which might entrench upon the immunities of a foreign minister or his domestics, should, on conviction, before the chancellor and chief justice, by confession, or the oath of one witness, be deemed violators of the law of nations, and disturbers of the public peace, and suffer such penalties and corporal punishments as that tribunal should think fit to inflict. But although the common law of England, which recognizes the privileges of ambassadors in their full force, is expressly adopted by our constitution, this statute can have no operation here, having never extended to us before or since the revolution; nor hath any provision been made on this subject, either by the congress of the united states, or our own internal legislature.

I have taken this notice of the statute of Anne, to meet an opinion which has been entertained, that an infringement of the privileges of an ambassador is subject to the penalties which that statute prescribes.

I proceed to state the circumstances of the complaint, and the law which arises upon it.

It appears in proof that not long since, one James Van Antwerp was retained as a coachman in the service of the minister of the united netherlands. Shortly afterwards, near the minister's door, and while busy in his service, he was arrested for a small debt by one of the constables, on a warrant which had been issued by a magistrate before such retainer. Van Antwerp apprized the constable that he was the minister's servant; and insisted on his privilege of exemption from arrest. He was, nevertheless, pursued by the constable into the minister's house, and even to the door of his library, an apartment in the second story. Here the con-

stable seized Van Antwerp by the collar, and, though repeatedly forbidden by the minister, violently dragged him down the stairs, and treated the minister himself personally with outrage and insult; and finally, the interposition of a magistrate was necessary to restore order, and rescue the prisoner out of his hands.

This is the nature of the case: and satisfaction having been formally demanded, it is become a subject of national concern: you will therefore find it your duty to give it a full and candid discussion.

The facts being proved, the manner and degree of punishment will depend on the common law—the crime, on the law of nations, which, as I before observed, is adopted by the common law. The arrest will then be deemed an unauthoritative and illegal act, and consequently false imprisonment, and an assault and breach of the peace, aggravated by the violation of the privileges of the minister, and the wanton insolence which accompanied it, and in this view, it will be indictable, and on conviction punishable by fine and imprisonment.

Gentlemen,

Notwithstanding the supreme court is so lately risen, besides those of an inferior degree, three capital crimes will fall under your consideration, to wit: passing counterfeit money of the emission of this state, burglary, and grand larceny. The first is an offence which hath prevailed to so great a degree, as to subject the citizens to innumerable frauds and even to threaten the credit of the paper medium; and yet, though uncommon pains have been taken, it has hitherto been impracticable to restrain it by examples of just severity. The detection of the counterfeit paper happens daily; but the guilt of this crime lies in the scienter; that is, the previous knowledge of the person who passed the

bill, that it was counterfeit; a fact extremely difficult to be proved. This being the criterion, you will have it carefully in view. The mere passing counterfeit money can be no offence. Such is the proficiency in this pernicious art, that it frequently imposes on men of discernment, and much oftener on the incautious and illiterate, in spite of the purity of their intentions.

Burglary also is a heinous offence, from the terror which it naturally inspires, and the fatal consequences to which it leads.

It consists in breaking and entering into a mansion or dwelling-house by night, with intent to commit a felony. In prosecuting your enquiries under this head, four circumstances call for attention—the time—the place—the manner—the intent. 1st, The act must be committed in the night time. If there be sufficient light to discern a man's countenance, there can be no burglary; but this does not extend to moon-light, however bright and luminous.

2dly. It must be committed in a mansion or dwelling-house, and not in a warehouse, stable, or the like; for there midnight terror cannot be inspired: yet if the warehouse or stable are part of the mansion-house, though not under the same roof, a burglary may be committed.

3dly. There must be both a breaking and entering. To take out or break a glass, open a window, pick a lock, or open it with a key—even to lift up the latch of a door, or unloose any other fastening—to come down a chimney—to knock at the door and rush in—any of these is a breaking, in the sense of the law.

4thly. The intent is carefully to be examined. To distinguish it from a trespass, the breaking and entering must be accompanied with a design to commit a robbery, murder, rape, or other felony: whether

they are actually perpetrated or not, is immaterial.

The third capital offence is grand larceny, which is the felonious taking and carrying away the goods of another. And here both the taking and carrying away are essential.

There is no other distinction between grand and petit larceny, than the value of the things stolen; and this determines the degree of punishment. According to our law, theft, of more than the value of five pounds, is grand larceny; to that value, or under, it is petit larceny.

One of the prisoners stands committed for entering on board a vessel fastened to one of the wharves, in the night time, opening the cabin door, and taking and carrying away a trunk, containing some wearing apparel and an hundred pounds in silver, belonging to one of the passengers. You will give the proper weight to a circumstance which materially distinguishes this enormity from a burglary, namely, that it was not committed in a dwelling house. If, therefore, there should be competent evidence of the fact, it is to be proceeded against as a grand larceny.

The sheriff's calendar, which will be handed to you, contains the names of the prisoners whose crimes I have described; some others are in custody, and stand bound by recognizance, to answer to accusations of an inferior degree. Such examinations and evidence as are in the power of the court, will be laid before you by the prosecutor for the people. I find nothing further at this time which requires our particular direction. If difficulties should arise, you will have the usual recourse to us for information.

Gentlemen,

Your charge, in general, is, to inquire into and present all offences committed within the body of this city and county, which shall come

to your knowledge, from treasons down to trespasses. In executing this important trust, on which the due administration of justice so much depends, the solemn oath you have now taken, points out the conduct you ought to pursue, and the motives by which you should be influenced. While you present no man through envy or prejudice, let not the guilty escape through fear or favour. While you are ready to hear every real grievance, let no citizen be vexed by prosecution for trivial matters, or on slender grounds. Act with becoming firmness, but with a calmness and deliberation suited to the solemnity of your office; and, lastly, be not only impartial and dispassionate, but diligent in your enquiries, that, arriving at truth, you may be enabled to determine wisely and justly; and thus, with the testimony of a good conscience, receive the approbation of your country for your faithful services.



WHEN lord Charles Grenville Montague raised his regiment in South Carolina, during the late war, to induce general Moultrie to accept of the command, and enter the British service, he wrote him the following letter:

SIR, March 11, 1781.

A Sincere wish to promote what may be to your advantage, induces me now to write. The freedom with which we have often conversed, makes me hope you will not take amiss what I say.

My own principles respecting the commencement of this unfortunate war, are well known to you; of course you can also conceive what I mention is of friendship. You have now fought bravely in the cause of your country for many years, and, in my opinion, fulfilled the duty every individual owes it;

You have had your share of hardships and difficulties; and, if the contest is still to be continued, younger hands should now take the tour from you. You have now a fair opening of quitting that service with honour and reputation to yourself, by going to Jamaica with me. The world will readily attribute it to the known friendship that has subsisted between us, and, by quitting this country for a short time, you would avoid any disagreeable conversations, and might return at your own leisure, to take possession of your estates for yourself and family. The regiment I am going with, I am to command; the only proof I can give you of my sincerity is, that I will quit that command to you with pleasure, and serve under you. I earnestly wish I could be the instrument to effect what I propose, as I think it would be a great means towards promoting that reconciliation we all wish for. A thousand circumstances concur to make this a proper period for you to embrace; our old acquaintance, my having been formerly governor in this province, the interest I have with the present commander, &c.

I give you my honour what I write is entirely unknown to the commander, or any one else, and so shall your answer be, if you favour me with one.

Your's, sincerely,

CHARLES MONTAGUE.

To brigadier gen. Moultrie.



Answer :

Haddrel's print, March 12, 1781.

My lord,

I Received yours this morning. I thank you for your wish to promote my advantage, but am much surpris'd at your proposition. I flattered myself I stood in a more favour-

able light with you. I shall write with the same freedom with which we used to converse, and doubt not you will receive it with the same candour. I have often heard you express your sentiments respecting this unfortunate war, when you thought the Americans injured; but am now astonished to find you taking an active part against them—though not fighting particularly on the continent—yet the seducing their soldiers away, to enlist in the British service, is nearly similar.

My lord, you are pleased to compliment me with having fought bravely in my country's cause for many years, and, in your opinion, fulfilled the duty every individual owes to it: but I differ widely with you in thinking that I have discharged my duty to my country, while it is still deluged in blood, and overrun by British troops, who exercise the most savage cruelties. When I entered into this contest, I did it with the most mature deliberation, with a determined resolution to risk my life and fortune in the cause. The hardships I have gone through, I look upon with the greatest pleasure and honour to myself. I shall continue to go on as I have begun, that my example may encourage the youths of America, to stand forth in defence of their rights and liberties. You call upon me now, and tell me I have a fair opening of quitting that service with honour and reputation to myself, by going with you to Jamaica. Good God! is it possible that such an idea could arise in the breast of a man of honour? I am sorry you should imagine I have so little regard for my own reputation, as to listen to such dishonourable proposals. Would you wish to have that man, whom you have honoured with your friendship, play the traitor? Surely not. You say, by quitting this country for a time,

I might avoid disagreeable conversations, and might return at my own leisure, and take possession of my estates for myself and family; but you have forgot to tell me how I am to get rid of the feelings of an injured, honest heart, and where to hide myself from myself. Could I be guilty of so much baseness, I should hate myself and shun mankind. This would be a fatal exchange for my present situation, with an easy and approving conscience, of having done my duty, and conducted myself as a man of honour.

My lord, I am sorry to observe, that I feel your friendship much abated, or you would not endeavour to prevail upon me to act so base a part. You earnestly wish you could bring it about, as you think it will be the means of bringing about that reconciliation we all wish for. I wish for a reconciliation as much as any man, but only upon honourable terms. The re-possession of my estates, the offer of the command of your regiment, and the honour you propose of serving under me, are paltry considerations to the loss of reputation. No, not the fee simple of that valuable island of Jamaica, should induce me to part with my integrity.

My lord, as you have made one proposal, give me leave to make another, which will be more honourable to us both. As you have an interest with your commanders, I would have you propose the withdrawing the British troops from the continent of America, allowing independence, and propose a peace. This being done, I will use my interest with my commanders to accept of the terms, and allow Great-Britain a free trade with America.

My lord, I could make one more proposal; but my situation, as a prisoner, circumscribes me within certain bounds. I must, therefore, conclude with allowing you the free

liberty to make what use of this you may think proper. Think better of me. I am, my lord, your lordship's most humble servant,

WILLIAM MOULTRIE.

To lord Charles Montague.



Account of the aurora borealis, founded on several years accurate observations.

THE hypothesis, that the aurora borealis may be accounted for upon principles of electricity, is undoubtedly well founded. During the space of about seven years, I have carefully observed most of them which have appeared—in the three first years of this space, I know not, that a single one escaped my observation, and my committing, except in a few instances, every circumstance to writing; in which time, and since, I have acquired the most palpable evidence that they are occasioned by electrical fire. It is, indeed, not very common that in the time of an aurora borealis, there should be few many clouds—yet it sometimes happens that there are a few sheets of cloud passing in the northern hemisphere at the time—I have seen this happen—and several times seen a sheet of cloud separate from others, and pass many degrees beyond the zenith, continually shooting electrical fire from its skirts. This is to me the clearest evidence that the whole appearance is produced by electrical fire.

The only difficulty that has for some years remained a desideratum to the complete investigation of the aurora borealis, is, why the appearance is ever invariably in the northern hemisphere?—my observation of concurrent circumstances has convinced me the reason is obvious. Whether the reason be sufficient to account for the phenomenon, the philosopher will judge.

Every one knows, that solids, with few exceptions, are electric, *per se*, and that fluids are non-electrics. We are then only to suppose, that immediately before an *aurora borealis*, a southerly wind blows, and it will account for the northerly appearance. A southerly wind is ever charged with a large share of watry particles; these in their way to the northward are continually passing solids or electrics, *per se*—and so become deeply charged with the electrical fluid. And as the watry particles are, doubtless, of different magnitudes, they will have different velocities: they will therefore become more and more dense until a congeries of vapour be formed, of different densities and differently charged; it will then exhibit something of the dusky circle, and the fire will begin to shoot. If the wind continue at south, both these appearances will be but faint. Suppose then the wind, after blowing from the southward for several days, shifts to the northward twelve or twenty four hours before the appearance of the light: it then meeting the vapour in its passage from the southward, operates like the weaver's reed, and quickly condenses it to a thick congeries—the dusky circle will be thick, and the fire dart often beyond the zenith.

These suppositions, I find rendered facts by occurring invariably, during the seven last years from my date, excepting only that in a few of my first observations, I did not note the circumstance of the wind—and for a year or two back, supposing my theory established by observation, I have not been quite so attentive to every circumstance as in the former years. With these exceptions only, I observe that for the time I have mentioned, every *aurora borealis* has been preceded by a southerly wind—either on the same day and continued at evening—the day before—or at

farthest on the third day back. This inclines me to suppose and believe that a southerly wind ever precedes the lights, and is the sole cause of their northern appearance. I am the more confirmed in the opinion, because the northern light in the time of the south wind blowing, varies to the eastward or westward as that does, and the largest appearance is ever directly opposite to it. I am so fully established in the opinion, that the south wind is the only cause of the northern appearance of the *aurora borealis*, that should one happen, and for many days before there were no south wind, which, however, I believe never takes place—it would not. I think, destroy my hypothesis. For I can conceive it possible, though not probable, that the vapour a south wind contains, may be composed of particles of equal magnitudes and equal velocities, with an equal charge of electrical fire. In such case, when the south wind ceases, if a calm for a few hours ensues, they may be driven back, for a considerable time, by a northerly wind, without forming a congeries, so that the fire can dart.

But it may be enquired, why every south wind does not produce an *aurora borealis*? I suppose it does, if it blows long, except it rain, for then the electrical fluid passes with the drops into the earth: but this sometimes happens in the day time, when the light is too feeble to be observed; or it may happen at too great a distance from the observer; or I conceive he may be too near: in either case he would not perceive it; for I suppose it requires a given column of air to look through, of a certain thickness, in order that the light might be perspicuous.

It may be also enquired, why northerly winds do not produce the *aurora borealis*? The reason is, northerly winds are charged with but very little vapour; even a north-east wind,

until it begins to rain, is drying; then what of the fluid it receives, it conducts to the earth.

with the painful sensations arising from a prospect of injury to many—perhaps ruin to some; who being incapable, or unwilling, to avail themselves of like advantages, look up to the legislative body for protection and redress, in affording which we apprehend your reputation and dignity at this time deeply interested.

To the general assembly of the state of Rhode island: the petition and memorial of the representatives of the people called quakers, in New England being met together in capacity of a meeting for sufferings,

Respectfully sheweth,

THAT it is not without a real concern, that we again address you; having lately witnessed your just and favourable interposition in respect to the iniquitous trade to Africa for slaves, which we as a society have for some time considered as a national evil, tending to draw down the divine displeasure: but being fully persuaded that the same principle of truth and justice, together with a desire for the preservation and welfare of our fellow citizens in general, constrain us, we hope it will not be deemed unseasonable to lay before you our concern, and to recommend to your serious consideration the repeal or amendment of several laws of this state, which we apprehend are, in their present operation, not only inconsistent with the principles of justice and good government, but also with the best sentiments and feelings of your constituents and our fellow citizens in general.

The act which makes void notes and book accounts, that are not settled within two years from the passing the same, we also apprehend to be of the same nature with the other.

We therefore respectfully intreat your candid and serious attention to the aforesaid laws, which we have reason to believe are now considered as real grievances by your constituents, and if continued in force, will prove a wide and fatal door of injustice and oppression, on the one hand, and depravity and corruption of morals on the other. And that you in wisdom will see meet to repeal the same, or make such amendments as will effectually prevent the mischiefs resulting therefrom.

Signed in and on behalf of the representatives aforesaid, at a meeting for sufferings, held at Providence, for New England, the 25th of the 2d month, by
THOMAS ARNOLD, clerk.

[N.B. The above petition was rejected]

As the act which makes the paper currency of this state, in its present depreciated value, a tender at par in payment of just debts, has been found inadequate to any valuable purpose of supporting its credit; whatever laudable intentions any may have had in promoting the said act, we apprehend they can no longer operate for its continuance, which now must be accompanied

Speech on the learned languages, written by the hon. Francis Hopkinson, and delivered by a young gentleman at a public commencement in the university of Pennsylvania.

Ladies and gentlemen,

I AM sensible of the danger and difficulty to which an orator must expose himself, who boldly ventures to oppose public prejudice, and contradict established opinions; and yet, without this literary heroism, philo-

sophic truth had never been brought to light. A rigid adherence to doctrines generally admitted, would have fixed us at this day in the errors of ancient philosophy, or have left us involved in the whimsical vortices of the more modern *Descartes*. The generality of mankind receive for truth whatever may be handed to them as such by those whom they are taught to esteem as men of profound learning. They are not anxious to enquire for themselves; because enquiry is replete with trouble; and it is much easier for them to adopt the opinions of others, than to form opinions for themselves. But woe to the man, who attempts to unhinge the popular system. *Galileo* was persecuted and imprisoned for asserting that the earth revolved on its axis; and was compelled publicly to renounce a truth, of which he was fully convinced, and of which there is now no doubt remaining.

These preparatory observations I thought necessary, as an apology for the manner in which I proposed to handle the subject assigned to me—to wit—“*The use and advantages of what are called the learned languages in the education of youth*”—these advantages ought, indeed, to be very great and manifest, to compensate for the precious time spent in acquiring them. Let us, for a moment, lay aside former prejudices, and consider the subject with candour and impartiality.

The benefits to be expected from the study of the dead languages, must, I think, flow from some or all of the following sources. It must either open a door of knowledge, to which there is no other means of access; or will polish the manners and enrich the mind with ideas not otherwise to be acquired; or will serve as a key to all other languages, and become the vehicle of universal communication.

With respect to the first, I venture to assert, and think it will hardly be controverted, that there is no ancient author, Latin, Greek, or Hebrew, philosopher, historian, or poet, of any reputation, whose existing works have not been translated by able hands into most of the modern languages of Europe. So that there can be no knowledge contained in those productions to which the reader of the present day may not have access, by the easy means of his native tongue. The treasures of the ancients have been minutely scrutinized, and every article of value held up to public view, and faithfully reflected from the mirrors of modern languages.

Neither can I see, in the second place, how an acquaintance with the Latin, Greek, or Hebrew tongues, should necessarily polish the manners or enrich the mind with ideas not otherwise to be acquired. Is there an inherent magic, a supernatural fecundity in those ancient languages, which modern modes of speech cannot boast?—When a plain man reads in his bible these words—“In the beginning was the word, and the word was with God”—has he not the same ideas suggested, and an equal comprehension of their meaning with the learned scholar, when he reads, in loftier tone—*Ἐν ἀρχῇ ἦν ὁ λόγος, καὶ ὁ λόγος ἦν πρὸς τὸν Θεόν*; Surely there can be no difference. As to polishing the manners—a minute and technical knowledge of the learned languages hath an effect so notoriously to the contrary, that to call a man *a mere scholar*, is as much as to say he has no manners at all. But perhaps, languages, like medals, acquire a value merely from their antiquity; if so, we ought to establish schools for teaching the Chinese tongue; which is certainly more ancient than either Latin or Greek, and, as some say, than even the Hebrew itself—look where we will for

a distinguished pre-eminence in those dead languages, such as may justify the great expense of time and study necessary to acquire them, and candour must acknowledge, that such pre-eminence is not to be found.

But, says the third position, they serve as a key to all modern languages, and may become an universal means of communication. The only purpose of language is to convey ideas: if modern speech does this, it is complete: if it does not, it is no language. What necessity then for a key? when a person says a house or a man, is he not as well understood, as if he should add, that the one was called *domus*, and the other *homo*, by the ancient Romans? terms are altogether arbitrary, and general consent alone adapts them to the things they are designed to represent: and surely, the general consent of the moderns is as respectable and valid, as the general consent of the ancients. The truth is, there is no natural connexion between words and things. If such a connexion was to constitute the perfection of a language, we must acknowledge, that the infant excels in propriety, when he calls the sheep *baa*, or a dog *bow wow*. But the Latin tongue, it is supposed, may serve as an universal means of communication between people of different nations—true—and so may any other language, if generally admitted and taught. The Latin tongue does not seem to be peculiarly and exclusively adapted to this purpose. For, notwithstanding that it has been inculcated with so much assiduity by innumerable private tutors and public institutions; for so many hundred years, yet the French is, at this day, a more universal language than the Latin. The experiment has been fairly made, and urged to the extent; yet but few people write in Latin, and fewer still use it as a medium of

conversation. As to the Greek, it is in fashion no where but in the schools; and none but Jews make use of the Hebrew. To what purpose, then, are so many years spent in acquiring these obsolete languages?—To what purpose?—A short story will answer this question.

The celebrated mr. Rowe went one day, to pay his court to the earl of Oxford, then lord high treasurer of England. The earl asked him if he understood Spanish? Mr. Rowe acknowledged he did not: but imagining that his lordship might intend to send him into Spain on some honourable commission, he added that he did not doubt but in a short time he might be able to understand and speak it. The earl recommended it to him to do so. Whereupon mr. Rowe took his leave; and, retiring into the country, applied himself industriously to the study of the Spanish language. After which he again waited on the earl, who asked him, if he understood it thoroughly?—mr. Rowe answering in the affirmative, the earl exclaimed—how happy are you, mr. Rowe, that you can now enjoy the pleasure of reading Don Quixote in the original!

How happy is the Latin scholar, for he can read Virgil and Horace in the original!

An observation or two on the method of teaching these learned languages shall close my speech on this occasion, which, I perceive, some think is already longer than it should be.

It might seem strange to assert that few teachers of a language have any taste for its beauties—and yet the case too often occurs in fact. Accustomed, as they are, to treat it by detail, and hacknied in a critical consideration of its component parts, they almost unavoidably lose all sense of its general effect, and

become strangers to that spirit of expression in which its principal elegance consists. For the same reason, the pupil never acquires a true taste for the learned languages, till long after he has been emancipated from the shackles of grammatical investigation. To teach a language by means of its grammar, is beginning at the wrong end; for no language ever originated in a grammar. All the spirit of a language must necessarily evaporate in a grammatical construction—let us take an example from our own tongue—suppose the following passage from Pope to be put into the hands of a boy, learning English—

“Heav’n first taught letters for some wretch’s aid,
“Some banish’d lover, or some captive maid;
“They live, they speak, they breathe what love inspires,
“Warm from the soul, and faithful to its fires;
“The virgin’s wish, without her fears, impart;
“Excuse the blush, and pour out all the heart;
“Speed the soft intercourse from soul to soul,
“And waft a sigh from Indus to the pole!”

Forthwith the learned grammarian and his industrious pupil fall to work on these beautiful lines. They mince them, without mercy, into verbs and adverbs, nouns and pronouns, substantives and adjectives—gerunds—participles—articles—and particles—and God knows what. But in this general laceration, what will become of the melody of the verse—the delicacy of sentiment—the elegance of expression—with a thousand nameless graces, not defined in the rules of grammar?—alas! all would vanish in the scholastic process. As well might an anatomist dissect a living body, with a view to

discover the nature and seat of the soul that animates it, as a grammarian, to investigate the powers of a language, by resolving it into its component parts. But what would the author say, could he be a witness of such a chemical distillation of his charming lines?—or what would Horace do, if he could be present in a modern school, and hear one of his elegant odes fruttered into all the small ware of the syntax?—what would he do!—he would be disposed to break the scholar’s head, and put the tutor to death.

But my zeal for truth is hurrying me beyond the bounds of discretion. The time may come, when teachers will be convinced that languages are not to be squared by rule and compass, as lands are surveyed; and that it is not necessary to search antiquity for the means of a reciprocal communication of ideas, because languages most in use, are, in truth, the most useful to be known.



*Answer to the preceding speech—
written by the same gentleman as
the former—and delivered by another student.*

Ladies and gentlemen,

MY fellow-student has entertained you with a dissertation on the learned languages, and added some strictures on the method of inculcating them in modern schools. He has handled the subject in his own excentric way, and has, I doubt not, obtained from this candid and polite audience, all the credit his ingenuity deserves. But ingenuity is not truth; and false reasoning, however varnished with wit, is false reasoning still: I shall not attempt to imitate my friend in the vivacity of his style; but he must excuse me if I endeavour to expose the fallacy of his arguments, and rescue so confide-

able a branch of modern education from the obloquy his capricious humour hath been pleased to throw upon it: Having myself been duly fermented with grammatical froth—kneaded and moulded by the discipline of the schools—baked, and, as it were, pining hot from the classical oven—and encrusted with science, can I bear these slanders on the learned languages, which I have been so long accustomed to respect, and which I have acquired with so much painful study, and yet sit silent by?—no!—the fire of old Rome, and the spirit of Athens, will not brook such indignity.

The first assertion, and indeed the ground on which he chiefly rests, is that all ancient authors of any repute have been translated into modern languages; from which he infers that the originals are of no further use. He might as well have said that because a shadow projects the true outlines of the substance, it is of equal value, and will answer the same purposes. There are numberless beauties to be discovered by a scholar, and a force and propriety, arising from what is called the *idion* of a language, which no translation can convey; not only this, but the real meaning of the author, even in the original, is, in many instances, not easily ascertained by the learned themselves. How then shall it be found in a translation? To prove this, we need only look at the voluminous notes upon Horace, or the various readings of Virgil, in which the most profound scholars have differed in opinion, and about which they have disputed, confuted, and refuted each other, time immemorial—and the matter is as far from decision as ever—what delightful obscurity! what glorious uncertainty! will a translation furnish any thing like this? surely not. The terms of a known language are too well understood to admit of much altercation—

all is a dead and languid precision. The system, the doctrines, the arguments of a modern author may be questioned and canvassed—but seldom his meaning; if he has any meaning at all.

The great and excellent use of the learned languages consists, in my opinion, in the two following circumstances:

First, they afford the moderns an inexhaustible source of ingenious altercation and profound conjecture; and,

Secondly, by deriving the technical terms of every science from those languages, a mysterious obscurity is obtained, which throws a veil over the face of truth, and screens the rays of knowledge from vulgar eyes.

As to the first—in the various readings of ancient authors, in notes, critical and explanatory, and in notes upon those notes, what a field is opened for profound erudition! and when the modern commentator finds himself hard pressed, it is but supposing an error to have crept into the text—it is but altering a letter or two, as occasion shall require, and he can make the original support his comment, with all the seeming reason in the world: and however another modern critic may dispute the prize with him, he is sure that the author himself will never come back to decide the contest. An obscure sentence will furnish a literary feast; and one half part of a long Greek or Hebrew word, has been sufficient to occasion a schism, and give the world a new religious sect.

I know of no modern author so rich in this kind of learning as Shakespeare—he wrote on the verge of the old and modern English; and has so blended the idioms of the writers of his day with those of their grandfathers, as to occasion much delightful uncertainty and ingenious

commentating---this, together with the incorrect manner in which his works have been handed to us, has afforded a glorious opportunity for guess work---and Warburton, Theobald, Johnson, and many others have exercised their talents accordingly.

But I hasten to the second advantage I mentioned, as peculiar to the dead languages, to wit---that by deriving terms from them into the learned sciences, a mysterious obscurity is obtained, which throws a veil over the face of truth, and screens the rays of knowledge from vulgar eyes.

When the barbarous nations of the north over-ran Europe, they obliterated almost every trace of science. A few monks only were in possession of the seeds of learning contained in the remaining works of ancient authors: when the day of knowledge again began to dawn, these manuscripts were in great repute; and when printing was invented, copies of them were exceedingly multiplied. As these were, then, the sources of science, no man was esteemed learned, who had not studied the languages in which they were written: and so Greek and Latin became almost the only avenues to knowledge; such was the use of the learned languages at that time. Very different, but not less important, is their use at this day: by means of repeated translations, the treasures of the ancients have been laid open to public view. Science, divelled of mystery, would lose its value, and men of learning forfeit that respect which the vulgar owe to profound erudition, were it not that the philosopher, the scholar, the man of science in every department, hath taken care to borrow a profusion of technical terms from the learned languages; which throw a mantle of mystery over his profession, and cover the secrets of his

art from the admiring multitude. So that modern learning consists, not so much in the study of *things*, as in the knowledge of *terms*. For, as the author of Hudibras observes,

All a rhetorician's rules
Teach nothing but to name his tools.

And so it is in every science---and so it ought to be; for, if it were otherwise---if the terms used by men of learning were given in the vulgar tongue, every body would understand them, and science soon become contemptible. For instance, a grave and learned physician thus informs his patient---"sit, your disorder is an *anthrax*; and I shall prescribe an emollient *cataplasma*;"---the poor man is filled with fear, wonder and respect. But should he tell him, in plain English---"you have got a boil, and must apply a poultice of bread and milk"---the patient would despise the doctor and the disease.

It is the Greek and Latin languages that furnish these high sounding words; so delightful to the ear when the sense is concealed.

Sounds have a singular effect upon the human mind---especially articulated sounds: and the effect is still more certain when these sounds either have no meaning at all, or are not understood---an ignorant woman weeping aloud under the influence of a powerful preacher, was asked the cause of her lamentation---don't you hear, said she, those charming words---*Mesopotamia, Pamphylia, and Phrygia!* And I knew a lady during the war, who did not possess one political principle, or had any precise idea of the real cause of contest between Great Britain and America; and yet was a professed and confirmed *tory*---merely from the fascination of sounds: *the imperial crown---the royal robes---the high court of parliament---the lord chancellor of England---and so on*---were words of irresistible influence: while captain A. the taylor,

colonel B. the tavern-keeper—and even general Washington, the farmer, only created contempt. But, I am persuaded, if some Indian chief, with a long Cherokee or Mohawk name, had commanded our armies, she would have thought much more respectfully of the American cause.

This being truth—and a truth founded in nature—will any one pretend to say that the Greek and Latin languages are of no use?—What! shall we call things by downright vulgar English names? Shall not the physician have his *paregorics* and *antispasmodics*, his *lenitives* and *sedatives*, his *antiphlogistics*, *cathartics*, and *diuretics*? shall not the lawyer have his *feri facias*, *scire facias* and *certioraris*? Or the divine his *latitudinarians*, *millenarians*, *sublapsarians* and *supralapsarians*?—Shall the chymist give up his hard words, and the botanist his technical terms, in which indeed his whole art consists?—Deplorable will be the state of erudition when this shall be the case—*knowledge*, indeed, might increase, and become more generally diffused; but *learning* would be no more—we might then say—such a man is a man of genius, of wisdom, of understanding:—but where should we find the man of profound erudition—one who would spurn at the simplicity of nature's works, and plunge in system deeper than common sense could ever fathom? But, thanks to our universities, colleges, academies, and schools—or rather, thanks to the learned languages which they so laboriously and industriously inculcate—such an era, it may be presumed, is yet far distant.

Address to the honourable the members of the convention of Virginia, by Tench Coxe, esq.

(Continued from page 432.)

THE length of the address I had lately the honour to make you, rendered it inconvenient at that time to bring before you some further considerations, which appear of importance. The situation of your eastern shore counties is a matter that should be seriously considered, before you determine to reject the proposed constitution. Should Virginia decline the new confederacy, the good people of Accomack and Northampton will find themselves separated from the rest of the state, by a great bay, larger than the entrance of the Mediterranean, which divides Africa from Europe; while the adjoining state of Maryland is distinguished from them by a mere imaginary line. The eastern shore of Virginia must be at this time exceedingly connected with the lower counties of Maryland, by blood and marriage, and by a variety of business. They would be particularly exposed to the fleets of the union and of foreigners, were they not to join the new confederacy; for their situation is almost insular, the length of the boundary line, dividing them from Maryland, being but fourteen miles. Whether they would remain with Virginia under these circumstances, or unite with Maryland and the union, seems a question deserving your serious reflexion. In considering this point, you will recollect, that every member of the Maryland convention for the eastern shore, and all the members of the Delaware convention, representing the body of the peninsula, were decidedly in favour of the constitution. You will also remember the inducements those counties would have, in the market for their produce, which, in the event of their being out of

the new union must be burdened with the impost that will certainly be laid upon all foreign articles imported. Similar considerations may influence other parts of your state to secede from Virginia, and cling to the union.

If there are any of the citizens of your state who expect to see manufactures established in Virginia, it will appear of great consequence to them that you should be a part of the new confederacy; for if your workmen cannot vend their commodities in the other states without meeting the foreign impost, which will fall on all articles not of the growth or manufacture of the union, it will operate exceedingly to discourage them. Two circumstances within your command, promise more success in manufactures, than might at first appear to be the case—your coal, which is yet peculiar to Virginia on the sea coast, an article highly important to a great number of manufactures; and cotton, which must be the great American raw material for piece goods. The shores of James and Apomattox rivers seem most particularly interested in these considerations, tho' they are of real and great importance to the state at large.

The expected trade of Virginia with that fertile country between Potowmack and the lakes, together with your Indian trade through the waters of the Ohio, would be lost, if your honourable house should finally reject the constitution. The waters of the Monongahela are indispensibly necessary to secure these advantages to you; but you will remember, the imposition of a toll and duty on every thing passing thro' that channel to and from Virginia, would turn the trade into another course. The new union would find its own interest in promoting the northern communications by the Susquehanna and the Mohawk river,

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which flow through New York, Pennsylvania and Maryland.

Should you attempt to form a small confederacy, you would be constrained to give up considerable points (some of them, perhaps, very injurious to you) to secure the accession of the few states who might consent to come into it. North Carolina, for instance, should that state decline the proposed government, might insist on her paper money being introduced into the business of both states. Many other inconveniences of a like nature would certainly present themselves.

The treaties subsisting at this time between the united states and foreign nations will not continue in force with Virginia, if separated from the union. We may doubt whether they would be renewed with her, as the inducements she could hold out, alone, would probably be insufficient, and it is reasonable to suppose a connexion with any state, that should withdraw herself from the union, would be declined, at least for a time, by all foreign powers who might desire a connexion with the new confederacy.

The shock to public and private credit, both at home and abroad, that will be consequent on the rejection of the proposed government, will be most violent and dreadful. Every scheme of prudence and enterprize among our own citizens, every plan of adventure and establishment here, many of which are doubtless now in contemplation by foreigners, will be checked and subverted. But should nine or ten states adopt the constitution, how miserable will be the condition of public and private credit in those states who decline it! Will any American or foreign merchant trust his property within their boundaries—will any foreign nation have the smallest confidence in an useless limb, dis severed from the body? America,

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in the deplorable event of the rejection of the federal constitution, will be like an hopeless victim whom justice has subjected to the rack. She will resemble one of those pitiable objects in the disjointed condition of her members. In one respect, indeed, her situation will be more dreadful. The *coup de grace* terminates all his agonies, while our distracted country will be doomed to drag on her miserable existence for a length of time to which no human mind can fix a period.

In such a situation of affairs, instead of expecting new schemes of emolument and advantage, we must foresee the certain loss of many old ones—instead of frequent and numerous emigrations, and an influx of imported wealth, we may be too certain of depopulation, and the exportation of property. Instead of the delightful and beneficial cultivation of the arts of peace, we must once more experience the miseries of civil discord—not to secure, but to destroy our peace—liberty—and safety.

It has been said by some, that the united states are much too extensive to continue under one government. But the youngest people now on the theatre of life remember this very country, joined by the Floridas on the south, and by Nova-Scotia, New-Brunswic, and Canada on the north, existing under one government. To all these were added the West India Islands, Newfoundland, the British territories in the East Indies, and the kingdoms of Great Britain and Ireland. It will be soon enough to consider whether we ought to separate, when a disposition of that kind is discovered in some of the states. Hitherto, no such disposition has appeared. The general convention, who were a respectable representation of our country, certainly did not think the idea either proper or conducive to our happiness, or they

would have framed their act accordingly. Congress have never recommended a separation to our consideration, nor has the legislature of any state advised or desired it. However pleasing it may be to individuals, there is no proof of its being the wish of a single county in the union. A little reflexion will shew it to be as inconsistent with our happiness and interest, as it is opposite to the wishes and feelings of the people. Were we united by the federal government, there would be no enemy at hand to disturb our perfect tranquility. The Spaniards on the south, we may assume, have infinitely more reason to be apprehensive of our movements, than we of theirs. The British provinces on the north are more likely, in the event of a war, to furnish opportunity against us. But they cannot be very injurious: and indeed they may rather serve the useful purpose of keeping us on our guard. We have nothing to fear from either of those quarters, provided we are united. In this respect, the united states, under the new constitution, will possess all the advantages in America, which Henry IV. hoped to produce by a general league in Europe, with this great difference in our favour, that the road to ours is through well conducted and free councils, independently held by the states concerned; and his scheme, however useful and noble the design, would necessarily have been effected by force and bloodshed.

Without advancing the arrogant idea that the proposed plan of federal government is perfectly unexceptionable, the proper question on this great occasion seems to be, whether the happiness of America will not be more effectually promoted by adopting it, with the power and right to introduce amendments provided in it, than by rejecting it under the present circumstances of our country.

Some may ask, why not previously amend?—We respectfully answer: First, because our circumstances do not admit of delay without the loss or postponement of many great advantages, and without many serious dangers and injuries at home and abroad. Secondly, because it is not to be expected that any future convention will possess, in a more eminent degree than the last, the necessary regard for the general interests of America, and the indispensable spirit of amity and concession displayed by them. Thirdly, because the gentlemen who disapprove of the government, acknowledge a variety of views, opinions, principles and feelings, as opposite and contradictory to each other, as they are to the proposed constitution. Fourthly, because seven of the states (and probably eight by this time) have adopted the government, some of which are extensive, and some contracted, some in the north, some in the south, and some in the centre, some the most numerous in free citizens, and some the least so, some with unchecked democratic state constitutions, and some with the reverse, some poor with a paper lawful money, and some rich with no lawful money but solid coin, some purely agricultural, and some manufacturing and commercial. Fifthly, because the adoption of the constitution by eight states (if it shall so appear) containing about two thirds of the free white inhabitants of the united states, is a strong proof that the convention have not mistaken the feelings, opinions, and interests of the people at large: and lastly, because it will appear, on due examination of the constitution, more easy to amend it after than before the adoption. Permit me for a few moments to ask your cool and close attention to this point. To amend before the adoption, will require that all the states, who are to become

members of the new confederacy, should adopt all the amendments that shall be adopted by any one. For example, if five amendments should be proposed by a new general convention, and adopted by one state, every other state that should not adopt them all, would effectually reject the constitution. That is, the consent of the whole thirteen will be necessary to obtain any one amendment, however salutary. But to amend the constitution after its adoption, will require the conventions or legislatures of only three fourths of the states: that is, ten out of the whole thirteen. Hence, it clearly follows, that the difficulty of obtaining amendments after the ratification, will be as much less, than to procure them before the ratification, as ten is less than thirteen.

It has been urged that the officers of the federal government will not part with power, after they have got it; but those who make this remark, really have not duly considered the constitution: for congress will be obliged to call a federal convention on the application of the legislatures of two thirds of the states: and all amendments proposed by such federal convention, are to be valid, when adopted by the legislatures or conventions of three fourths of the states. It therefore clearly appears that two thirds of the states can always procure a general convention for the purpose of amending the constitution; and that three fourths of them can introduce those amendments into the constitution, although the president, senate and federal house of representatives should be unanimously opposed to each and all of them. Congress therefore cannot hold any power, which three fourths of the states shall not approve on experience.

The government now offered to the free citizens of America, is truly

a government of the people, for no man can be excluded from giving his voice, or from holding the offices which are necessary to execute it. Is it requisite, to qualify a man to elect or be elected, that he be rich? No, for there is no qualification of property, though it was demanded by some who now oppose the constitution. Is it necessary to be of noble blood or of a powerful family? No, for it is declared that there shall be no titles, rank or nobility. Is there a power given to a king or a prince, to alter and amend the constitution? No, for it is vested, where I trust it will ever remain, in the people themselves.

AN AMERICAN.

Philadelphia, May 28, 1788.



Remarks on the proposed system of federal government: delivered in an address to the freemen of Edenton and the county of Chowan, North Carolina, by the hon. Hugh Williamson, esq. delegate from said state to the late continental convention.

THOUGH I am conscious that a subject of the greatest magnitude must suffer in the hands of such an advocate, I cannot refuse, at the request of my fellow-citizens, to make some observations on the new plan of government.

It seems to be generally admitted, that the system of government which has been proposed by the late convention, is well calculated to relieve us from many of the grievances under which we have been labouring. If I might express my particular sentiments on this subject, I should describe it as more free and more perfect than any form of government that ever has been adopted by any nation; but I would not say it has no faults. Imperfection is inseparable from every human device. Seve-

ral objections were made to this system by two or three very respectable characters in the convention, which have been the subject of much conversation; and other objections, by citizens of this state, have lately reached our ears. It is proper that you should consider of these objections. They are of two kinds; they respect the things that are in the system, and the things that are not in it. We are told that there should have been a section for securing the trial by jury in civil cases, and the liberty of the press: that there should also have been a declaration of rights. In the new system, it is provided, that "the trial of all crimes, except in cases of impeachment, shall be by jury:" but this provision could not possibly be extended to all civil cases. For it is well known that the trial by jury is not general and uniform throughout the united states, either in cases of admiralty or of chancery; hence it became necessary to submit the question to the general legislature, who might accommodate their laws on this occasion to the desires and habits of the nation. Surely there is no prohibition in a case that is untouched.

We have been told that the liberty of the press is not secured by the new constitution. Be pleased to examine the plan, and you will find that the liberty of the press and the laws of Mahomet are equally affected by it. The new government is to have the power of protecting literary property; the very power which you have by a special act delegated to the present congress. There was a time in England, when neither book, pamphlet, nor paper could be published without a licence from government. That restraint was finally removed in the year 1694: and, by such removal, their press became perfectly free, for it is not under the restraint of any licence. Certainly

the new government can have no power to impose restraints. The citizens of the united states have no more occasion for a second declaration of rights, than they have for a section in favour of the press. Their rights, in the several states, have long since been explained and secured by particular declarations, which make a part of their several constitutions. It is granted, and perfectly understood, that under the government of the assemblies of the states, and under the government of the congress, every right is reserved to the individual, which he has not expressly delegated to this, or that legislature. The other objections that have been made to the new plan of government, are : That it absorbs the powers of the several states ; that the national judiciary is too extensive ; that a standing army is permitted ; that congress is allowed to regulate trade ; that the several states are prevented from taxing exports, for their own benefit.

When gentlemen are pleased to complain, that little power is left in the hands of the separate states—they should be advised to cast an eye upon the large code of laws, which have passed in this state since the peace. Let them consider how few of those laws have been framed, for the general benefit of the nation. Nine out of ten of them, are domestic ; calculated for the sole use of this state, or of particular citizens. There must still be use for such laws, though you should enable the congress to collect a revenue for national purposes : and the collection of that revenue includes the chief of the new powers, which are now to be committed to the congress.

Hitherto you have delegated certain powers to the congress, and other powers to the assemblies of the states. The portion that you have delegated to congress, is found to

have been useless, because it is too small : and the powers that are committed to the assemblies of the several states, are also found to be absolutely ineffectual for national purposes, because they can never be so managed as to operate in concert. Of what use is that small portion of reserved powers ? It neither makes you respectable nor powerful. The consequence of such reservation is national contempt abroad, and a state of dangerous weakness at home. What avails the claim of power, which appears to be nothing better than the empty whistling of a name ? The congress will be chosen by yourselves, as your members of assembly are. They will be creatures of your hands, and subject to your advice. Protected and cherished by the small addition of power which you shall put into their hands, you may become a great and respectable nation.

It is complained that the powers of the national judiciary are too extensive. This objection appears to have the greatest weight in the eyes of gentlemen who have not carefully compared the powers which are to be delegated, with those that had been formerly delegated to congress. The powers that are now to be committed to the national legislature, as they are detailed in the 8th section of the first article, have already been chiefly delegated to the congress, under one form or another, except those which are contained in the first paragraph of that section. And the objects that are now to be submitted to the supreme judiciary, or to the inferior courts, are those which naturally arise from the constitutional laws of congress. If there is a single new case, that can be exceptionable, it is that between a foreigner and a citizen, or that between the citizens of different states. These cases may come up by appeal. It is provided in this system, that

there shall be no fraudulent tender in the payments of debts. Foreigners, with whom we have treaties, will trust our citizens on the faith of this engagement. And the citizens of different states will do the same. If the congress had a negative on the laws of the several states, they would certainly prevent all such laws as might endanger the honour or peace of the nation, by making a tender of base money; but they have no such power, and it is at least possible that some state may be found in this union, disposed to break the constitution, and abolish private debts by such tenders. In these cases the courts of the offending state, would probably decide according to its own laws. The foreigner would complain; and the nation might be involved in war for the support of such dishonest measures. Is it not better to have a court of appeals in which the judges can only be determined by the laws of the nation? This court is equally to be desired by the citizens of different states. But we are told that justice will be delayed, and the poor will be drawn away by the rich to a distant court. The authors of this remark have not fully considered the question, else they must have recollected, that the poor of this country have little to do with foreigners, or with the citizens of distant states. They do not consider that there may be an inferior court in every state; nor have they recollected, that the appeals, being with such exceptions, and under such regulations as congress shall make, will never be permitted for trifling sums, or under trivial pretences, unless we can suppose that the national legislature shall be composed of knaves and fools. The line, that separates the powers of the national legislature from those of the several states, is clearly drawn. The several states reserve every power that can be exer-

cised for the particular use and comfort of the state. They do not yield a single power which is not purely of national concern: nor do they yield a single power which is not absolutely necessary to the safety and prosperity of the nation, nor one that could be employed to any effect in the hands of particular states. The powers of judiciary naturally arise from those of the legislature. Questions that are of a national concern, and those cases which are determinable by the general laws of the nation, are to be referred to the national judiciary: but they have not any thing to do with a single case either civil or criminal, which respects the private and particular concerns of a state or its citizens.

The possibility of keeping regular troops in the public service, has been urged as another objection against the new constitution. It is very remarkable that the same objection has not been made against the original confederation, in which the same grievance obtained without the same guards. It is now provided, that no appropriation of money for the use of the army shall be for a longer time than two years. Provision is also made for having a powerful militia, in which case there never can be occasion for many regular troops.

It has been objected in some of the southern states, that the congress, by a majority of votes, is to have the power to regulate trade. It is universally admitted that congress ought to have this power, else our commerce, which is nearly ruined, can never be restored: but some gentlemen think that the concurrence of two thirds of the votes in congress should have been required. By the sundry regulations of commerce, it will be in the power of government not only to collect a vast revenue for the general benefit of the nation, but to secure the carrying

trade in the hands of citizens in preference to strangers. It has been alleged that there are few ships belonging to the southern states; and that the price of freight must rise, in consequence of our excluding many foreign vessels: but when we have not vessels of our own, it is certainly proper that we should hire those of citizens in preference to strangers; for our revenue is promoted, and the nation is strengthened, by the profits that remain in the hands of citizens; we are injured by throwing them into the hands of strangers; and though the price of freight should rise for two or three years, this advantage is fully due to our brethren in the eastern and middle states, who, with great and exemplary candour, have given us equal advantages in return. A small increase in the price of freight would operate greatly in favour of the southern states: it would promote the spirit of ship-building; it would promote a nursery for native seamen, and would afford support to the poor who live near the sea coast; it would increase the value of their lands, and, at the same time, it would reduce their taxes.

It has finally been objected that the several states are not permitted to tax their exports for the benefit of their particular treasuries. This strange objection has been occasionally repeated by citizens of this state. They must have transplanted it from another state, for it could not have been the growth of North Carolina.

Such have been the objections against the new constitution.

Whilst the honest patriot, who guards with jealous eye the liberties of his country, and apprehends danger under every form—the placeman in every state, who fears lest his office should pass into other hands—the idle, the factions, and the dishonest, who live by plunder or speculation

on the miseries of their country—while these, assisted by a numerous body of secret enemies, who never have been reconciled to our independence, are seeking for objections to this constitution, it is a remarkable circumstance, and a very high encomium on the plan, that nothing more plausible has been offered against it; for it is an easy matter to find faults.

Let us turn our eyes to a more fruitful subject; let us consider the present condition of the united states, and the particular benefits that North Carolina must reap by the proposed form of government. Without money, no government can be supported; and congress can raise no money under the present constitution. They have not the power to make commercial treaties, because they cannot preserve them when made. Hence it is, that we are the prey of every nation. We are indulged in such foreign commerce, as must be hurtful to us. We are prohibited from that which might be profitable; and we are accordingly told, that in the last two years, the thirteen states have hardly paid into the treasury, as much as should have been paid by a single state. Intestine commotions in some of the states—paper money in others—a want of inclination in some, and a general suspicion throughout the union, that the burdens is unequally laid—added to the general loss of trade—have produced a general bankruptcy, and loss of honour. We have borrowed money of Spain—she demands the principal, but we cannot pay the interest. It is a circumstance perfectly humiliating, that we should remain under obligations to that nation. We are considerably indebted to France: but she is too generous to insist upon what she knows we cannot pay, either the principal or interest. In the hour of distress, we borrowed money

in Holland ; not from the government, but from private citizens. Those who were called the patriots, were our friends, and they are oppressed in their turn by hosts of enemies. They will soon have need of money. At this hour, we are not able to pay the interest of their loan. What is to be done ? Will you borrow money again from other citizens of that oppressed republic, to pay the interest of what you borrowed from their brethren ? This would be a painful expedient : but our want of government may render it necessary. You have two or three ministers abroad ; they must soon return home, for they cannot be supported. You have four or five hundred troops scattered along the Ohio to protect the frontier inhabitants, and give some value to your lands ; those troops are ill paid, and in a fair way for being disbanded. There is hardly a circumstance remaining—hardly one external mark—by which you can deserve to be called a nation. You are not in a condition to resist the most contemptible enemy. What is there to prevent an Algerine pirate from landing on your coast, and carrying your citizens into slavery ? You have not a single sloop of war. Does one of the states attempt to raise a little money by imposts or other commercial regulations ? A neighbouring state immediately alters her laws, and defeats the revenue, by throwing the trade into a different channel. Instead of supporting or assisting, we are uniformly taking the advantage of one another. Such an assemblage of people are not a nation. Like a dark cloud, without cohesion or firmness, we are ready to be torn asunder, and scattered abroad, by every breeze of external violence, or internal commotion.

Is there a man in this state, who believes it possible for us to continue under such a government ?—Let us

suppose but for a minute, that such a measure should be attempted. Let us suppose that the several states shall be required and obliged to pay their several quotas according to the original plan. You know that North Carolina, on the last four years, has not paid one dollar into the treasury, for eight dollars that she ought to have paid. We must increase our taxes exceedingly, and those taxes must be of the most grievous kind ; they must be taxes on lands and heads ; taxes that cannot fail to grind the face of the poor ; for it is clear that we can raise little by imports and exports. Some foreign goods are imported by water from the northern states : such goods pay a duty for the benefit of those states, which is seldom drawn back. This operates as a tax upon our citizens. On this side, Virginia promotes her revenue to the amount of twenty five thousand dollars every year, by a tax on our tobacco that she exports. South Carolina on the other side, may avail herself of similar opportunities. Two thirds of the foreign goods that are consumed in this state, are imported by land from Virginia or South Carolina. Such goods pay a certain impost for the benefit of the importing states, but our treasury is not profited by this commerce. By such means, our citizens are taxed more than one hundred thousand dollars every year ; but the state does not receive credit for a shilling of that money. Like a patient that is bleeding at both arms, North Carolina must soon expire under such wasteful operations. Unless I am greatly mistaken, we have seen enough of the state of the union, and of North Carolina in particular, to be assured that another form of government is become necessary. Is the form now proposed, well calculated to give relief ? To this we must answer in the affirmative. All

foreign goods that shall be imported into these states, are to pay a duty for the use of the nation. All the states will be on a footing, whether they have bad ports or good ones. No duties will be laid on exports; hence the planter will receive the true value of his produce, wherever it may be shipped. If excises are laid on wine, spirits, or other luxuries, they must be uniform throughout the states. By a careful management of imposts and excises, the national expences may be discharged without any other species of tax; but if a poll tax, or land tax, shall ever become necessary, the weight must press equally on every part of the union. For in all cases, such taxes must be according to the number of inhabitants. Is it not a pleasing consideration that North Carolina, under all her natural disadvantages, must have the same facility of paying her share of the public debt, as the most favoured, or the most fortunate state? She gains no advantage by this plan, but she recovers from her misfortunes. She stands on the same footing with her sister states, and they are too generous to desire that she should stand on lower ground. When you consider those parts of the new system which are of the greatest import—those which respect the general question of liberty and safety—you will recollect that the states in convention were unanimous; and you must remember, that some of the members of that body have risked their lives in defence of liberty; but the system does not require the help of such arguments; it will bear the most scrupulous examination.

When you refer the proposed system to the particular circumstances of North Carolina, and consider how she is to be affected by this plan—you must find the utmost reason to rejoice in the prospect of better times.

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This is a sentiment that I have ventured with the greater confidence, because it is the general opinion of my late honourable colleagues, and I have the utmost reliance in their superior abilities. But if our constituents shall discover faults where we could not see any—or if they shall suppose that a plan is formed for abridging their liberties, when we imagined that we had been securing both liberty and property on a more stable foundation—if they perceive that they are to suffer a loss, where we thought they must rise from a misfortune—they will at last do us the justice to charge those errors to the head, and not to the heart.

The proposed system is now in your hands, and with it the fate of your country. We have a common interest, for we are embarked in the same vessel. At present she is in a sea of troubles, without sails, oars, or pilot; ready to be dashed to pieces by every flaw of wind. You may secure a port, unless you think it better to remain at sea. If there is any man among you that wishes for troubled times and fluctuating measures, that he may live by speculations, and thrive by the calamities of the state, this government is not for him.

If there is any man who envies the prosperity of a native citizen—who wishes that we should remain without native merchants or seamen, without shipping, without manufactures, without commerce—poor and contemptible, the tributaries of a foreign country—this government is not for him.

And if there is any man who has never been reconciled to our independence, who wishes to see us degraded and insulted abroad, oppressed by anarchy at home, and torn into pieces by factions—incapable of resistance, and ready to become a prey to the first invader—this government is not for him.

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But it is a government, unless I am greatly mistaken, that gives the fairest promise of being firm and honourable ; safe from foreign invasion or domestic sedition—a government by which our commerce must be protected and enlarged ; the value of our produce and of our lands must be increased ; the labourer and the mechanic must be encouraged and supported. It is a form of government that is perfectly fitted for protecting liberty and property, and for cherishing the good citizen and the honest man.*



Address to the people of the state of New York, on the subject of the proposed federal constitution : said to be written by the hon. John Jay, esq. minister for foreign affairs to the united states in congress assembled.

Friends and fellow citizens,

THERE are times and seasons, when general evils spread general alarm and uneasiness ; and yet arise from causes too complicated and too little understood by many, to produce an unanimity of opinions respecting their remedies. Hence it is, that on such occasions, the conflict of arguments too often excites a conflict of passions, and introduces a degree of discord and animosity, which, by agitating the public mind, dispose it to precipitation and extravagance. They, who on the ocean have been unexpectedly enveloped with tempests, or suddenly entangled among rocks and shoals, know the value of that serene self-possession

N O T E S.

* The freemen, to whom the above address was delivered, afterwards agreed to the resolutions inserted in the American Museum, Vol. III. p. 71.

and presence of mind, to which, in such cases, they owed their preservation : nor will the heroes who have given us victory and peace, hesitate to acknowledge, that we are as much indebted for those blessings to the calm prevision, and cool intrepidity, which planned and conducted our military measures, as to the glowing animation with which they were executed.

While reason retains her rule—while men are as ready to receive as to give advice—and as willing to be convinced themselves, as to convince others—there are few political evils from which a free and enlightened people cannot deliver themselves. It is unquestionably true, that the great body of the people love their country, and wish it prosperity ; and this observation is particularly applicable to the people of a free country, for they have more and stronger reasons for loving it than others. It is not, therefore, to vicious motives that the unhappy divisions, which sometimes prevail among them, are to be imputed ; the people at large always mean well, and although they may, on certain occasions, be misled by the counsels, or injured by the efforts of the few who expect more advantage from the wreck, than from the preservation of national prosperity, yet the motives of these few are by no means to be confounded with those of the community in general.

That such seeds of discord and danger have been disseminated, and begin to take root in America, as, unless eradicated, will soon poison our gardens and our fields, is a truth much to be lamented ; and the more so, as their growth rapidly increases, while we are wasting the season in honestly but imprudently disputing, not whether they shall be pulled up, but by whom, in what manner, and with what instruments, the work shall be done.

When the king of Great-Britain, misguided by men who did not merit his confidence, asserted the unjust claim of binding us in all cases whatsoever, and prepared to obtain our submission by force, the object, which engrossed our attention, however important, was nevertheless plain and simple. "What shall we do?" was the question. The people answered, let us unite our counsels and our arms. They sent delegates to congress, and soldiers to the field. Confiding in the probity and wisdom of congress, they received their recommendations as if they had been laws: and that ready acquiescence in their advice enabled those patriots to save their country. Then there was little leisure or disposition for controversy respecting the expediency of measures: hostile fleets soon filled our ports, and hostile armies spread desolation on our shores. Union was then considered as the most essential of human means: and we almost worshipped it with as much fervour, as pagans in distress formerly implored the protection of their tutelar deities. That union was the child of wisdom: heaven blessed it, and it wrought out our political salvation.

That glorious war was succeeded by an advantageous peace. When danger disappeared, ease, tranquillity, and a sense of security loosened the bands of union: and congress, and soldiers, and good faith depreciated with their apparent importance. Recommendations lost their influence: and requisitions were rendered nugatory, not by their want of propriety, but by their want of power. The spirit of private gain expelled the spirit of public good: and men became more intent on the means of enriching and aggrandizing themselves, than of enriching and aggrandizing their country. Hence the war-worn veteran, whose reward for

toils and wounds existed in written promises, found congress without the means, and too many of the states without the disposition, to do him justice. Hard necessity compelled him, and others under similar circumstances, to sell their honest claims on the public for a little bread; and thus unmerited misfortunes and patriotic distresses became articles of speculation and commerce.

These and many other evils, too well known to require enumeration, imperceptibly stole in upon us, and acquired an unhappy influence on our public affairs. But such evils, like the worst of weeds, will naturally spring up in so rich a soil: and a good government is as necessary to subdue the one, as an attentive gardener or husbandman is to destroy the other. Even the garden of Paradise required to be dressed: and while men continue to be constantly impelled to error and to wrong, by innumerable circumstances and temptations, so long will society experience the unceasing necessity of government.

It is a pity that the expectations, which actuated the authors of the existing confederation, neither have nor can be realized: accustomed to see and admire the glorious spirit which moved all ranks of people in the most gloomy moments of the war—observing their steadfast attachment to union, and the wisdom they so often manifested both in choosing and confiding in their rulers—those gentlemen were led to flatter themselves that the people of America only required to know what ought to be done, to do it. This amiable mistake induced them to institute a national government in such a manner, as, though very fit to give advice, was yet destitute of power, and so constructed as to be very unfit to be trusted with it. They seem not to have been sensible that mere advice is a

had substitute for laws : nor to have recollected that the advice even of the allwise and best of beings, has been always disregarded by a great majority of all the men that ever lived.

Experience in a severe preceptor : but it teaches useful truths, and, however harsh, is always honest. Be calm and dispassionate, and listen to what it tells us.

Prior to the revolution, we had little occasion to enquire or know much about national affairs, for although they existed, and were managed, yet they were managed for us, but not by us. Intent on our domestic concerns, our internal legislative business, our agriculture, and our buying and selling, we were seldom anxious about what passed or was doing in foreign courts. As we had nothing to do with that department of policy, so the affairs of it were not detailed to us, and we took as little pains to inform ourselves, as others did to inform us of them. War, and peace, alliances, and treaties, and commerce, and navigation, were conducted and regulated without our advice or controul. While we had liberty and justice, and in security enjoyed the fruits of our "vine and fig tree," we were in general too content and too much occupied, to be at the trouble of investigating the various political combinations in this department, or to examine and perceive how exceedingly important they often were to the advancement and protection of our prosperity. This habit and turn of thinking affords one reason why so much more care was taken, and so much more wisdom displayed, in forming our state governments, than in forming our federal or national one.

By the confederation, as it now stands, the direction of general and national affairs is committed to a sin-

gle body of men, viz. the congress. They may make war, but are not empowered to raise men or money to carry it on. They may make peace, but without power to see the terms of it observed—They may form alliances, but without ability to comply with the stipulations on their part—They may enter into treaties of commerce, but without power to enforce them, at home or abroad—They may borrow money, but without having the means of repayment—They may partly regulate commerce, but without authority to execute their ordinances—They may appoint ministers and other officers of trust, but without power to try or punish them for misdemeanors—They may resolve, but cannot execute either with dispatch or with secrecy—In short, they may consult, and deliberate, and recommend, and make requisitions ; and they who please, may regard them.

From this new and wonderful system of government, it has come to pass, that almost every national object of every kind, is at this day unprovided for : and other nations, taking the advantage of its imbecility, are daily multiplying commercial restraints upon us. Our fur trade is gone to Canada, and British garri-sons keep the keys of it. Our shipyards have almost ceased to disturb the repose of the neighbourhood by the noise of the axe and hammer : and while foreign flags fly triumphantly above our highest houses, the American stars seldom do more than shed a few feeble rays about the humble masts of river sloops and coasting schooners. The greater part of our hardy seamen are ploughing the ocean in foreign pay ; and not a few of our ingenious shipwrights are now building vessels on alien shores. Although our increasing agriculture and industry extend and multiply our productions, yet they con-

stantly diminish in value : and although we permit all nations to fill our country with their merchandizes, yet their best markets are shut against us. Is there an English, or a French, or a Spanish island or port in the West-Indies, to which an American vessel can carry a cargo of flour for sale ? Not one. The Algerines exclude us from the Mediterranean, and adjacent countries : and we are neither able to purchase, nor to command the free use of those seas. Can our little towns or larger cities consume the immense productions of our fertile country ? or will they, without trade, be able to pay a good price for the proportion which they do consume ? The last season gave a very unequivocal answer to these questions—What numbers of fine cattle have returned from this city to the country, for want of buyers ! What great quantities of salted and other provisions still lie useless in the stores ! To how much below the former price, is our corn, and wheat, and flour, and lumber rapidly falling ! Our debts remain undiminished, and the interest on them accumulating—our credit abroad is nearly extinguished, and at home unrestored—they who had money, have sent it beyond the reach of our laws, and scarcely any man can borrow of his neighbour. Nay, does not experience also tell us, that it is as difficult to pay as to borrow ? That even our houses and lands cannot command money—that law suits and usurious contracts abound—that our farms sell on executions for less than half their value—and that distress in various forms, and in various ways, is approaching fast to the doors of our best citizens ?

These things have been gradually coming upon us ever since the peace : they have been perceived and proclaimed : but the universal rage and pursuit of private gain conspired

with other causes, to prevent any proper efforts being made to meliorate our condition by due attention to our national affairs, until the late convention was convened for that purpose. From the result of their deliberations, the states expected to derive much good ; and, should they be disappointed, it will probably be not less their misfortune than their fault. That convention was in general composed of excellent and tried men—men who had become conspicuous for their wisdom and public services, and whose names and characters will be venerated by posterity. Generous and candid minds cannot perceive, without pain, the illiberal manner in which some have taken the liberty to treat them ; nor forbear to impute it to impure and improper motives. Zeal for public good, like zeal for religion, may sometimes carry men beyond the bounds of reason ; but it is not conceivable, that on this occasion, it should find means so to inebriate any candid American, as to make him forget what he owed to truth and to decency, or induce him either to believe or to say, that the almost unanimous advice of the convention, proceeded from a wicked combination and conspiracy against the liberties of their country. This is not the temper with which we should receive and consider their recommendations, nor the treatment that would be worthy either of us or them. Let us continue careful, therefore, that facts do not warrant historians to tell future generations, that envy, malice, and uncharitableness pursued our patriotic benefactors to their graves ; and that not even pre-eminence in virtue, nor lives devoted to the public, could shield them from obloquy and detraction. On the contrary, let our bosoms always retain a sufficient degree of honest indignation to disappoint and discourage those who expect our thanks or

applause, for calumniating our most faithful and meritorious friends.

The convention concurred in opinion with the people, that a national government, competent to every national object, was indispensibly necessary : and it was as plain to them, as it now is to all America, that the present confederation does not provide for such a government. These points being agreed, they proceeded to consider how and in what manner, such a government could be formed, as, on the one hand, should be sufficiently energetic to raise us from our prostrate and distressed situation, and, on the other, be perfectly consistent with the liberties of the people of every state. Like men, to whom the experience of other ages and countries had taught wisdom, they not only determined that it should be erected by, and depend on the people ; but remembering the many instances in which governments vested solely in one man, or one body of men, had degenerated into tyrannies, they judged it most prudent that the three great branches of power should be committed to different hands, and therefore that the executive should be separated from the legislative, and the judicial from both. Thus far the propriety of their work is easily seen and understood, and therefore is thus far *almost* universally approved—for no one man or thing under the sun ever yet pleased every body.

The next question was, what particular powers should be given to these three branches ? Here the different views and interests of the different states, as well as the different abstract opinions of their members, on such points, interposed many difficulties. Here the business became complicated, and presented a wide field for investigation ; too wide for every eye to take a quick and comprehensive view of it.

It is said that “ in a multitude of

counsellors there is safety,” because, in the first place, there is greater security for probity ; and in the next, if every member cast in only his mite of information and argument, their joint stock of both will thereby become greater than the stock possessed by any one single man out of doors. Gentlemen out of doors, therefore, should not be hasty in condemning a system, which probably rests on more good reasons than they are aware of, especially when formed under such advantages, and recommended by so many men of distinguished worth and abilities.

The difficulties before mentioned occupied the convention a long time : and it was not without mutual concessions that they were at last surmounted. These concessions serve to explain to us the reason why some parts of the system please in some states, which displease in others ; and why many of the objections which have been made to it, are so contradictory and inconsistent with one another. It does great credit to the temper and talents of the convention, that they were able so to reconcile the different views and interests of the different states, and the clashing opinions of their members, as to unite with such singular and almost perfect unanimity in any plan whatever, on a subject so intricate and perplexed. It shews that it must have been thoroughly discussed and understood : and probably, if the community at large had the same lights and reasons before them, they would, if equally candid and uninfluenced, be equally unanimous.

It would be arduous, and indeed impossible, to comprize within the limits of this address, a full discussion of every part of the plan. Such a task would require a volume : and few men have leisure or inclination to read volumes on any subject. The objections made to it are almost with-

out number—and many of them without reason. Some of them are real and honest, and others merely ostensible. There are friends to union and a national government, who have serious doubts, who wish to be informed, and to be convinced: and there are others who, neither wishing for union, nor any national government at all, will oppose and object to any plan that can be contrived.

We are told, among other strange things, that the liberty of the press is left insecure by the proposed constitution: and yet that constitution says neither more or less about it, than the constitution of the state of New-York does. We are told that it deprives us of trial by jury, whereas the fact is, that it expressly secures it in certain cases, and takes it away in none—It is absurd to construe the silence of this, or of our own constitution, relative to a great number of our rights, into a total extinction of them. Silence and blank paper neither grant nor take away any thing. Complaints are also made that the proposed constitution is not accompanied by a bill of rights: and yet they who make these complaints, know and are content that no bill of rights accompanied the constitution of this state. In days and countries, where monarchs and their subjects were frequently disputing about prerogative and privileges, the latter often found it necessary, as it were, to run out the line between them, and oblige the former to admit by solemn acts, called bills of rights, that certain enumerated rights belonged to the people, and were not comprehended in the royal prerogative. But, thank God, we have no such disputes—we have no monarchs to contend with, or demand admissions from. The proposed government is to be the government of the people: all its officers are to be their officers, and to exercise no rights but

such as the people commit to them. The constitution only serves to point out that part of the people's business, which they think proper by it to refer to the management of the persons therein designated—those persons are to receive that business to manage, not for themselves, and as their own, but as agents and overseers for the people, to whom they are constantly responsible, and by whom only they are to be appointed.

But the design of this address is not to investigate the merits of the plan, nor of the objections made to it. They who seriously contemplate the present state of our affairs, will be convinced that other considerations of at least equal importance demand their attention. Let it be admitted that this plan, like every thing else devised by man, has its imperfections. That it does not please every body, is certain: and there is little reason to expect one that will. It is a question of great moment to you, whether the probability of our being able seasonably to obtain a better, is such, as to render it prudent and advisable to reject this, and run the risk. Candidly to consider this question, is the design of this address.

As the importance of this question must be obvious to every man, whatever his private opinions respecting it may be, it becomes us all to treat it in that calm and temperate manner, which a subject, so deeply interesting to the future welfare of our country and posterity, requires. Let us, therefore, as much as possible, repress and compose that irritation in our minds, which too warm disputes about it may have excited. Let us endeavour to forget that this or that man, is on this or that side; and that we ourselves, perhaps without sufficient reflection, have classed ourselves with one or the other party. Let us remember, that this is not to be regarded as a matter that only

touches our local parties, but as one so great, so general, and so extensive in its future consequences to America, that for our deciding upon it according to the best of our unbiassed judgment, we must be highly responsible both here and hereafter.

The question now before us, naturally leads to three enquiries :

1. Whether it is probable that a better plan can be obtained ?

2. Whether, if attainable, it is likely to be in season ?

3. What would be our situation, if, after rejecting this, all our efforts to obtain a better should prove fruitless.

The men, who formed this plan, are Americans, who had long deserved and enjoyed our confidence, and who are as much interested in having a good government as any of us are, or can be. They were appointed to that business at a time when the states had become very sensible of the derangement of our national affairs, and of the impossibility of retrieving them under the existing confederation. Altho' well persuaded that nothing but a good national government could oppose and divert the tide of evils that was flowing in upon us, yet those gentlemen met in convention with minds perfectly unprejudiced in favour of any particular plan. The minds of their constituents were at that time equally cool and dispassionate. All agreed in the necessity of doing something : but no one ventured to say decidedly what precisely ought to be done. Opinions were then fluctuating and unfixed : and whatever might have been the wishes of a few individuals, yet while the convention deliberated, the people remained in silent suspense. Neither wedded to favourite systems of their own, nor influenced by popular ones abroad, the members were more desirous to receive light from, than to impress their

private sentiments on, one another. These circumstances naturally opened the door to that spirit of candour, of calm enquiry, of mutual accommodation, and mutual respect, which entered into the convention with them, and regulated their debates and proceedings.

The impossibility of agreeing upon any plan that would exactly quadrate with the local policy and objects of every state, soon became evident ; and they wisely thought it better mutually to concede, and accommodate, and in that way to fashion their system as much as possible by the circumstances and wishes of different states, than, by pertinaciously adhering, each to his own ideas, oblige the convention to rise without doing any thing. They were sensible, that obstacles, arising from local circumstances, would not cease, while those circumstances continued to exist : and so far as those circumstances depended on differences of climate, productions, and commerce, that no change was to be expected. They were likewise sensible, that on a subject so comprehensive, and involving such a variety of points and questions, the most able, the most candid, and the most honest men will differ in opinion. The same proposition seldom strikes many minds exactly in the same point of light : different habits of thinking, different degrees and modes of education, different prejudices and opinions, early formed and long entertained, conspire with a multitude of other circumstances, to produce among men a diversity and contrariety of opinions on questions of difficulty. Liberality, therefore, as well as prudence, induced them to treat each other's opinions with tenderness, to argue without asperity, and to endeavour to convince the judgment without hurting the feelings of each other. Although many weeks were passed

in these discussions, some points remained, on which a unison of opinions could not be effected. Here again that same happy disposition to unite and conciliate, induced them to meet each other; and enabled them, by mutual concessions, finally to complete and agree to the plan they have recommended, and that too with a degree of unanimity, which, considering the variety of discordant views and ideas they had to reconcile, is really astonishing.

They tell us very honestly, that this plan is the result of accommodation—they do not hold it up as the best of all possible ones, but only as the best which they could unite in, and agree to. If such men, appointed and meeting under such auspicious circumstances, and so sincerely disposed to conciliation, could go no further in their endeavours to please every state and every body, what reason have we at present to expect any system that would give more general satisfaction?

Suppose this plan to be rejected, what measures would you propose for obtaining a better? Some will answer, let us appoint another convention, and as every thing has been said and written, that can well be said and written on the subject, they will be better informed than the former one was, and consequently be better able to make and agree upon a more eligible one.

This reasoning is fair: and, as far as it goes, has weight; but it nevertheless takes one thing for granted, which appears very doubtful: for although the new convention might have more information, and perhaps equal abilities, yet it does not from thence follow, that they would be equally disposed to agree. The contrary of this position is the most probable. You must have observed, that the same temper and equanimity which prevailed

among the people on the former occasion, no longer exists. We have unhappily become divided into parties; and this important subject has been handled with such indiscreet and offensive acrimony, and with so many little unhandsome artifices and misrepresentations, that pernicious heats and animosities have been kindled and spread their flames far and wide among us. When, therefore, it becomes a question who shall be deputed to the new convention, we cannot flatter ourselves that the talents and integrity of the candidates will determine who shall be elected. Federal electors will vote for federal deputies, and anti-federal electors for antifederal ones. Nor will either party prefer the most moderate of their adherents: for, as the most staunch and active partizans will be the most popular, so the men most willing and able to carry points, to oppose, and divide, and embarrass their opponents, will be chosen. A convention, formed at such a season, and of such men, would be but too exact an epitome of the great body that named them. The same party views, the same propensity to opposition, the same distrusts and jealousies, and the same accommodating spirit, which prevail without, would be concentrated and ferment with still greater violence within. Each deputy would recollect who sent him, and why he was sent; and be too apt to consider himself bound in honour, to contend and act vigorously under the standard of his party, and not hazard their displeasure by preferring compromise to victory. As vice does not sow the seeds of virtue, so neither does passion cultivate the fruits of reason. Suspicions and resentments create no disposition to conciliate, nor do they infuse a desire of making partial and personal objects bend to general union and the common good. The utmost ef-

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forts of that excellent disposition were necessary to enable the late convention to perform their task ; and although contrary causes sometimes operate similar effects, yet to expect that discord and animosity should produce the fruits of confidence and agreement, is to expect “ grapes from thorns, and figs from thistles.”

The states of Georgia, Delaware, Jersey, and Connecticut, have adopted the present plan with unexampled unanimity. They are content with it as it is : and consequently their deputies, being apprized of the sentiments of their constituents, will be little inclined to make alterations, and cannot be otherwise than averse to changes, which they have no reason to think would be agreeable to their people. Some other states, tho’ less unanimous, have nevertheless adopted it by very respectable majorities ; and for reasons so evidently cogent, that even the minority in one of them, have nobly pledged themselves for its promotion and support. From these circumstances, the new convention would derive and experience difficulties unknown to the former. Nor are these the only additional difficulties they would have to encounter. Few are ignorant that there has lately sprung up a sect of politicians, who teach and profess to believe that the extent of our nation is too great for the superintendence of one national government ; and on that principle argue, that it ought to be divided into two or three. This doctrine, however mischievous in its tendency and consequences, has its advocates : and, should any of them be sent to the convention, it will naturally be their policy, rather to cherish than to prevent divisions : for, well knowing that the institution of any national government, would blast their favourite system, no measures that lead to it can meet with their aid or approbation,

Nor can we be certain, whether or not any, and what foreign influence would, on such an occasion, be indirectly exerted, nor for what purposes. Delicacy forbids an ample discussion of this question. Thus much may be said, without error or offence, viz. That such foreign nations as desire the prosperity of America, and would rejoice to see her become great and powerful, under the auspices of a government wisely calculated to extend her commerce, to encourage her navigation and marine, and to direct the whole weight of her power and resources as her interest and honour may require, will doubtless be friendly to the union of the states, and to the establishment of a government able to perpetuate, protect and dignify it. Such other foreign nations, if any such there be, who, jealous of our growing importance, and fearful that our commerce and navigation should impair their own—behold our rapid population with regret, and apprehend that the enterprising spirit of our people, when seconded by power and probability of success, may be directed to objects not consistent with their policy or interests, cannot fail to wish that we may continue a weak and a divided people.

These considerations merit much attention : and candid men will judge how far they render it probable that a new convention would be able either to agree in a better plan, or, with tolerable unanimity, in any plan at all. Any plan forcibly carried, by a slender majority, must expect numerous opponents among the people, who, especially in their present temper, would be more inclined to reject than adopt any system so made and carried. We should in such a case again see the press teeming with publications for and against it : for as the minority would take pains to justify their dissent, so would

the majority be industrious to display the wisdom of their proceedings. Hence new divisions, new parties, and new distractions would ensue, and no one can foresee or conjecture when or how they would terminate.

Let those who are sanguine in their expectations of a better plan from a new convention, also reflect on the delays and risks to which it would expose us. Let them consider whether we ought, by continuing much longer in our present humiliated condition, to give other nations further time to perfect their restrictive systems of commerce, to reconcile their own people to them, and to fence and guard and strengthen them by all those regulations and contrivances in which a jealous policy is ever fruitful. Let them consider whether we ought to give further opportunities to discord to alienate the hearts of our citizens from one another, and thereby encourage new Cromwells to bold exploits. Are we certain that our foreign creditors will continue patient, and ready to proportion their forbearance to our delays? Are we sure that our distresses, dissensions, and weakness will neither invite hostility nor insult? if they should, how ill prepared shall we be for defence, without union, without government, without money, and without credit!

It seems necessary to remind you, that some time must yet elapse, before all the states will have decided on the present plan. If they reject it, some time must also pass before the measure of a new convention, can be brought about and generally agreed to. A farther space of time will then be requisite to elect their deputies, and send them on to convention. What time they may expend, when met, cannot be divined: and it is equally uncertain how much time the several states may take to deliberate and decide on any plan they may recom-

mend—if adopted, still a further space of time will be necessary to organize and set it in motion. In the mean time, our affairs are daily going on from bad to worse; and it is not rash to say that our distresses are accumulating like compound interest.

But if, for the reasons already mentioned, and others that we cannot now perceive, the new convention, instead of producing a better plan, should give us only a history of their disputes, or should offer us one still less pleasing than the present, where should we be then? The old confederation has done its best, and cannot help us; and is now so relaxed and feeble, that in all probability it would not survive so violent a shock. Then “to your tents, Oh Israel!” would be the word. Then every band of union would be severed. Then every state would be a little nation, jealous of its neighbours, and anxious to strengthen itself by foreign alliances, against its former friends. Then farewell to fraternal affection, unsuspecting intercourse, and mutual participation in commerce, navigation and citizenship. Then would arise mutual restrictions and fears, mutual garrisons, and standing armies, and all those dreadful evils which for so many ages plagued England, Scotland, Wales, and Ireland, while they continued disunited, and were played off against each other.

Consider, my fellow citizens, what you are about, before it is too late—consider what, in such an event, would be your particular case. You know the geography of your state, and the consequences of your local position. Jersey and Connecticut, to whom your impost laws have been unkind—Jersey and Connecticut, who have adopted the present plan, and expect much good from it—will impute its miscarriage and all

the consequent evils to you. They now consider your opposition as dictated more by your fondness for your impost, than for those rights to which they have never been behind you in attachment. They cannot, they will not love you—they border upon you, and are your neighbours: but you will soon cease to regard their neighbourhood as a blessing. You have but one port and outlet to your commerce: and how you are to keep that outlet free and uninterrupted, merits consideration. What advantage Vermont in combination with others, might take of you, may easily be conjectured; nor will you be at a loss to perceive how much reason the people of Long Island, whom you cannot protect, have to deprecate being constantly exposed to the depredations of every invader.

These are short hints—they ought not to be more developed—you can easily in your own minds dilate and trace them through all their relative circumstances and connections. Pause then for a moment, and reflect whether the matters you are disputing about, are of sufficient moment to justify your running such extravagant risks. Reflect that the present plan comes recommended to you by men and fellow citizens, who have given you the highest proofs that men can give, of their justice, their love for liberty and their country, of their prudence, of their application, and of their talents. They tell you it is the best that they could form; and that in their opinion, it is necessary to redeem you from those calamities which already begin to be heavy upon us all. You find that not only those men, but others of similar characters, and of whom you have also had very ample experience, advise you to adopt it. You find that whole states concur in the sentiment, and among them are your next neighbours; both whom have shed much

blood in the cause of liberty, and have manifested as strong and constant a predilection for a free republican government as any states in the union, and perhaps in the world. They perceive not those latent mischiefs in it, with which some double-sighted politicians endeavour to alarm you. You cannot but be sensible that this plan or constitution will always be in the hands and power of the people, and that if on experiment, it should be found defective or incompetent, they may either remedy its defects, or substitute another in its room. The objectionable parts of it are certainly very questionable: for otherwise there would not be such a contrariety of opinions about them. Experience will better determine such questions than theoretical arguments, and so far as the danger of abuses is urged against the institution of a government, remember that a power to do good, always involves a power to do harm. We must in the business of government, as well as in all other business, have some degree of confidence, as well as a great degree of caution. Who on a sick bed would refuse medicines from a physician, merely because it is as much in his power to administer deadly poisons, as salutary remedies?

You cannot be certain, that by rejecting the proposed plan you would not place yourselves in a very awkward situation. Suppose nine states should nevertheless adopt it, would you not in that case be obliged either to separate from the union, or rescind your dissent? The first would not be eligible, nor could the latter be pleasant—A mere hint is sufficient on this topic—You cannot but be aware of the consequences.

Consider then, how weighty and how many considerations advise and persuade the people of America to remain in the safe and easy path of

union ; to continue to move and act as they hitherto have done, as a band of brothers ; to have confidence in themselves and in one another ; and since all cannot see with the same eyes, at least to give the proposed constitution a fair trial, and to mend it as time, occasion, and experience may dictate. It would little become us to verify the predictions of those who ventured to prophecy, that peace, instead of blessing us with happiness and tranquility, would serve only as the signal for factions, discords and civil contentions to rage in our land, and overwhelm it with misery and distress.

Let us also be mindful that the cause of freedom greatly depends on the use we make of the singular opportunities we enjoy of governing ourselves wisely ; for if the event should prove, that the people of this country either cannot or will not govern themselves, who will hereafter be advocates for systems, which, however charming in theory and prospect, are not reducible to practice ? If the people of our nation, instead of consenting to be governed by laws of their own making, and rulers of their own choosing, should let licentiousness, disorder, and confusion reign over them, the minds of men every where, will insensibly become alienated from republican forms, and prepared to prefer and acquiesce in governments, which, though less friendly to liberty, afford more peace and security.

Receive this address with the same candour with which it is written ; and may the spirit of wisdom and patriotism direct and distinguish your councils and your conduct.

A citizen of New York.

From the Pennsylvania magazine.

The old bachelor, No. VI.

(Continued from page 167.)

O H ! that I had been made an oyster ! that I had been stationed in the bottom of the sea ! The winds might have blown their utmost ; they might have swelled the waves mountains high, I should have heeded them not. Mankind might have been satiated with folly, deceit, and iniquity, it would not have troubled me. But what is more than all the rest, I should have propagated my species in a numerous offspring, without the help, without the plagues, without the expence of a female assistant.—

Here some journey-man-philosopher would interrupt me with a learned dissertation on sexes ; and by a chain of irrefragable suppositions, prove that oysters are male and female. What's that to you, sir ? Who asked your opinion in this matter ? The deuce is in these coxcombs, that they cannot let a man go on his own way, but they must be throwing straws across his path. Go, mr. Philosopher, about your business. Go, catch butterflies, and search for the pineal gland of a musketoe.

Oh that I had been made an oyster ! 'Tis true I should forfeit what are called the enjoyments of life ; that is, I should not eat turtle-soup and venison, 'till I nauseated both ; nor drink Madeira and claret 'till my head ached—true—neither should I be tormented with the treachery of servants, the hypocrisy of relations and nominal friends, or the insults and sarcasms of my fellow oysters.

You should have heard from me before this, mr. Aitken, but I have been sick—very sick—almost at the point of death. I caught cold by putting on a damp shirt. If I had been married, my wife, perhaps, would have taken care that my linen

should be well aired—perhaps not. Be that as it may, I was very sick ; no body troubled their heads about me. I lay helpless, languishing, and neglected above, my servants rioted and plundered below. Every thing went into confusion. The common comforts of the sick were not administered to me. I lay many hours alone, given up to my own melancholy reflections. I thought I should die. I supposed myself dead—I saw my own funeral—Not a single tear to embalm my memory. A few straggling neighbours attend the scanty procession, conversing on politics as they follow me to the grave. The following day some person in the next street asks one of my near neighbours, “ How does the old bachelor ? I hear he is sick.” “ He was sick, but he is well enough now ; he was buried yesterday.” “ Dear me ! I never heard it ; how has the old curmudgeon left his estate ?”—“ To the Pennsylvania hospital.” No more is said about me—they pass on to other chat. After three days, I am no more remembered, than if I had never existed—except by the managers of the Pennsylvania hospital. No widow to be visited and comforted for the loss of me : no children to keep my name and memory alive in the world, and to talk of their father some ten or a dozen years after my decease : no elegies, either in verse or prose, to celebrate the virtues I never possessed, or apologize for the faults I really had ; not even a paragraph in a news-paper to announce my departure—Yes, I had some comfort in supposing that my name might creep into the fag end of your magazine, under the list of deaths, with a declaration that I had left my estate to the Pennsylvania hospital.

Such was the dismal train of ideas that presented to my imagina-

tion. My disorder increased. My life was despaired of. Some half a dozen second and third cousins came to see me. They disgusted me with their officious, overacted kindnesses. “ Why did not you send, my dear cousin, to let me know you was sick ?” cries one. “ I never heard a word of it till this morning ; I came the moment I was informed of your danger,” says another ;—“ Do take this,—pray try that—there is nothing better for a fever ; I have known it do wonders ; mr. Such-a-one was given over by the doctors, and recovered by the use of it.”—Another of my very loving relations sat down by my bed side, and with a dismal face, began to expatiate on the uncertainty of life ; and then, after a few common place observations, and half a dozen hems and haws and inward groans, he came to the main point he had in view,—“ I hope, my dear cousin, said he, that you have settled your worldly affairs ; your loving relations expect it of you—I hope you have made your will—these things had better not be delayed—It will be an ease to your mind, when that necessary business is done, and you will not die a bit the sooner for having completed it. We all hope you may recover. God grant you may ! but, as we are all mortal, and know not how soon we may be called upon, it is prudent to provide against the worst.” I told him that my will was already made, and that I had no inclination to alter it. They continued to teize me with unremitting cruelty. My strength was so exhausted that I could not scold, and storm and swear, as I wished to do. I fretted inwardly—My physician too was in league with my cousins ; he denied me every thing I desired, and forced upon me every thing I loathed and abhorred. My situation was truly deplorable—I earnestly wished for a draught of cool

water—I requested it in terms of the most pathetic solicitation ; but in vain. At length, however, I prevailed on an old negro wench, who is not worth a farthing, and yet the most valuable servant I have, to convey privately to me a tankard of water fresh from the pump. I drank it off greedily. It threw me into a profuse sweat, and a deep sleep. It saved my life. I began to recover from that time. No sooner was I out of danger, but my loving cousins, who had not been to see me for four years preceding my illness, left me with one consent ; and it is very probable, they will not come to see me again for four years to come. Heaven grant they may not !—But I fancy I need not be under any apprehensions on that score, as they will discover by this paper, that I have left my estate to the Pennsylvania hospital.

Such is the forlorn state of an old bachelor ; sick or well, there is none that will do him a service, or even a common act of civility, but from the most interested motives. I sometimes wish I had been married when I was young ; but when I look round amongst my acquaintance, and see an insulting tyrannical wife, a reprobate spendthrift son, and a daughter running off with the first vagabond that offers, I hug myself in my solitary state, and bless my stars, that I did not marry when I was young.

Upon the whole, I find so many reasons to wish I was a married man, and see so many reasons to rejoice I am not, that I am like the pendulum of a clock, hanging in suspense, and perpetually vibrating between two opinions. Notwithstanding all the fine things that have been said, time out of mind, about the married state, I am persuaded that he who marries, must venture boldly. It is not a subject that will bear much reasoning upon. Ninety nine times

out of a hundred, it is passion, not reason, that points to matrimony. Should a man, before he engages, call up to his view all the disasters, troubles, and inconveniences, which probably may, which certainly must, occur in the married state, he would never have courage to undertake the task. In my youthful days, I fancied myself in love two or three times. I even made considerable advances towards a courtship ; but I reasoned too much on the consequences, and therefore remain, as you see, a fretful old bachelor.



Conjectures on the causes of the earthquakes of New England.

Continued from page 306.

IN this enquiry into the causes of earthquakes, it is not my design to enter into a particular discussion of the several hypotheses philosophers have assigned, as accounting for the production of such phenomena. I mean to consider the subject no further than it has relation to the earthquakes of New England, and what may be gathered, as to their causes, from the preceding history and remarks.

From the phenomena and observations that have been mentioned, we may safely infer, that the earthquakes of New England have been produced by something which has moved along under the surface of the earth. Whatever may have been the case in other places, all the earthquakes of this country, so far as we have any accounts of them, have been of the same kind ; consisting, not of a simple instantaneous vibration, like that of an electrical shock, but of a gradual heaving, swell, or undulation of the earth. This has moved along in much the same path, with a motion not very swift ; and it has reached

deep enough below the surface of the earth, to affect and disturb the fountains, springs, wells, and pits of water. These phenomena are effects, which would naturally lead us to conclude, that the causes, whatever they may be, had their seat, rise and operations under the surface of the earth. And this conclusion from the phenomena, is strongly confirmed from observation. For the shocks have come on, rose to their greatest height, and gone off, to all appearance and observation, as if they had been occasioned by the rolling of some solid body under the surface of the earth. In this manner professor Winthrop describes that which happened November 22, 1755 :—" I was then," says he, " sitting on a brick hearth : and the sensation excited in me, was exactly the same as if some small solid body, by moving along under the hearth, had raised up the bricks successively, which immediately settled down again."* The same observation has been frequently made by others ; and is agreeable to all the accounts that can be collected. And from these accounts of the several phenomena of the earthquakes, and the observations that have been made upon them, I think we may lay it down as a pretty certain fact, that the earthquakes of New England have been caused by something which has moved along under the surface of the country.

What thus moved under, and hove up the surface of the earth, was probably a strong elastic vapour. This is inferred from the phenomena that have attended the earthquakes.

Among these phenomena, there were some that preceded the earthquakes, and looked like a previous preparation. In the earthquakes of

1727 and 1755, in particular, it was evident, that the causes by which they were produced, were at work several days before they became ripe for an explosion. As though some grand fermentation was taking place in the bowels of the earth, the water, in several wells and springs, was uncommonly altered in its motion, colour, smell and quality. This was observed three or four days before there was any earthquake. Nothing could better agree with the origin and production of a subterraneous elastic vapour, than this circumstance. For however such a vapour be generated, by mixture, fermentation or fire, it would require some previous preparation, for its production, or before it would be collected in sufficient quantities to cause an explosion, or acquire sufficient force to move and shake the surface of the earth.

The noise or roar, occasioned by the earthquake, has always been such as might have been expected from a subterraneous vapour, when fiercely driving along under the surface of the earth. What report might be expected from a strong elastic vapour, when its motion is confined and directed by a particular channel or passage, we may learn from that of a blazing chimney. The action of fire, when turning the inflammable material, with which the chimney abounds, into flame and vapour, produceth a noise or roar of a very particular kind ; and which seems to be different from almost any other : and there is nothing to which the report of our earthquakes is more similar, or has been more often compared.

There is also an apparent agreement between the effects of a subterraneous vapour, and the kind and motion of the shocks. When the materials, from which a subterraneous vapour is produced, lie promiscuously mingled and blended toge-

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* Lecture on earthquakes, p. 12.

ther, the effect of an explosion would be a violent ebullition, or blast upwards; tearing and rending a circle of earth, all around. This seems to have been the case in the earthquakes of Sicily, Lima and Jamaica. When the vapours can have a regular discharge through any aperture in the surface of the earth, they will vent themselves in copious effusions and exhalations, and thus spend their force this way, as they gather strength from time to time. Thus it has been with Hecla formerly; and with Vesuvius, Ætna, and other volcanoes now. But when the vapours are confined under the surface of the earth, and have subterraneous passages, or proper strata, for them to run in, by the violence of their expansion, they will heave up the surface of the earth, and thus cause, not an instantaneous concussion, but a progressive swell or undulation of the earth. And this will be continued till the vapours, thus confined, find or force for themselves a passage, where they may burst from their caverns, and discharge themselves into the open air. And these are phenomena in all respects agreeing with those that have attended the earthquakes of this country.

The strength and force of such a vapour, would be sufficient to account for the violence of any shocks we have had. A very great force must be requisite to heave up, and cause a progressive swell in the surface of the earth, and this, perhaps, from some depth below. And with what force subterraneous vapours may be attended, we may form some idea from their effects. In those which have shook Vesuvius and Ætna, it has been no uncommon thing to see them throw up at once, such clouds of sand, ashes, and pumice-stones, as are capable of darkening the whole air, and covering the neighbouring country with a shower

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of dust, &c. to many miles distance. Great stones, also, of some tons weight, are often thrown to the distance of two or three miles, by such explosions. Mons. Bouguer tells us, that "he met with stones in South-America, of eight or nine feet diameter, that had been thrown from the volcano Catopaxi, by one of these blasts, to the distance of more than three leagues." In Ulloa's account, the whole plain, near Latacunga, is said to be full of pieces of rocks, some of which were thrown, from the same volcano, to the distance of five leagues.† If subterraneous vapours, when they had nothing to confine them, have acted with such force, we may easily conceive that they must heave up, and cause a progressive swell in the surface of the earth, when their force was confined, and their motion directed by a particular passage.

The eruptions and effusions that have attended our earthquakes, have also borne strong marks of subterraneous vapour. That a vapour of sufficient force to shake and move the surface of a whole country, should break out in many places, where it came near to the surface of the earth, is agreeable to the presumption of theory. Thus it has been with several of our earthquakes. In that of 1727, there was an eruption at Newbury, attended with an effusion of sand, containing small mixtures of sulphur, and a very noxious, ill-scented vapour. Strong sulphureous smells were observed in other places; and, as some supposed, there were also appearances of flame. In the earthquake of 1755, there were eruptions at Scituate, Pembroke, Lancaster, &c. with large effusions of sand, probably of a sulphu-

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† Phil. Trans. for 1760, p. 592.
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reous nature. Whether this was the case with any of the other earthquakes, the accounts are not particular enough to determine. But in these, both the matter and smell attending the eruptions, afforded strong marks and evidence of subterraneous vapours.

The earthquakes of New England have also made such alterations in the bowels, and upon the surface of the earth, as a strong subterraneous vapour would produce. Very considerable alterations might be expected in the bowels, and upon the surface of the earth, and in the system of springs, fountains, currents, and streams of water, from a vapour of such force as to break through the surface of the earth, and of such extent as to reach from one country to another. Such effects have always followed the larger shocks. In that of 1663, incredible alterations are said to have been made in the surface of the earth at Canada, for many leagues through the country. Rocks and mountains were, in some places, thrown down, and considerably removed; and the channel in some parts of the river St. Lawrence, was very much changed and altered. In those of 1727 and 1755, the surface of the earth, in some parts of New England, was considerably broken and changed; and the whole system of fountains and springs, was greatly affected. Great alterations were made in wells, ponds, fountains, and currents of water: some were dried up, others opened; new ones produced, and, in many, the kind, quality, and quantity of the water was greatly changed—alterations in all respects similar to what might be expected from subterraneous vapours fiercely driving along under the surface of the earth, with a force sufficient to move and shake so large a part of its surface.

This opinion agrees also with the

effects which the earthquakes have had on the water. The earthquakes of New England have been felt not only upon the land, but also upon the sea. Several vessels, which have been upon the coasts at the times of the larger shocks, have been very sensibly affected. To the people on board, the shocks seemed as if the vessels had struck upon a rock; or rather, as if something had thumped against their bottoms. This, it is probable, was the very case; and is agreeable to what might be expected from the operation of subterraneous vapours.

The earthquakes moved with a velocity sufficient to communicate the same kind of motion to the water that they did to the earth; and thus caused a very deep, large, and extensive swell or wave. This wave, arising from the bottom, rolled along with much the same velocity as the earthquake moved: the effect of which, when it came to a vessel floating upon the water, would be a very considerable stroke or thump against the bottom—more or less violent, according to the violence of the shock, and the depth of the water. And in this manner have vessels, upon the coast, been affected;—some scarce perceiving it; others not at all; while to others it was pretty violent.

There have been other effects upon the water, such as a surprising flux and reflux of the sea—extraordinary agitations and commotions of the waters—an uncommon destruction of fish, &c. These effects have not been common, and never but at a considerable distance from the coast of New England. And they seem to be plain and evident marks and effects of the discharge of the subterraneous vapours, at the bottom of the sea. Such a discharge, when small, would be sufficient to occasion the destruction of such fish as were

near it : and when large, would put an end to the earthquake, and produce the most extraordinary agitations and commotions of the sea, by a furious eruption of vapours at its bottom ; which would immediately force their way through, or carry up before them, the whole body of water that lay over them.

And thus as to the conclusion :—It might be naturally expected, that as the vapours, by which the earthquakes were caused, were some time in growing ripe, fermenting, or in a state of previous preparation, they would not be wholly spent or discharged at once, but leave small remainders at particular places. Thus it has proved in all the great earthquakes we have had. The vapours, by which they have been produced, have not been wholly spent at the first shock : but what has remained, and what has gathered after a great explosion, has produced various small shocks in several places, for some time after the great ones :—thus wasting and evaporating by little and little, as they were collected and prepared at first ; till, by degrees, all has become quiet again.

Such have been the phenomena that have attended the earthquakes of New England.—And to me, they appear to be such, as (viewed either together or apart) make it highly probable, that what moved under, and hove up the surface of the earth, was a strong elastic vapour.*

The origin or production of such a vapour, may be accounted for from the contents of the earth. Much the largest part of the contents of the

earth, will always remain hidden from our view, and beyond the reach of our knowledge. We have, however, penetrated far enough below its surface, to find, that many of the bodies it contains, are of such a texture, or contain particles of such a nature, as to generate, or be easily turned into vapour. This is the case with coals, salts, sulphur, nitre, air, water, most kinds of minerals, and all substances which contain oily particles. Such bodies, at least some of the particles they contain, are easily and often turned into a very strong, subtle, elastic vapour. With some, nothing more is necessary to generate a very powerful vapour, than a bare mixture of different bodies. Thus equal quantities of powdered sulphur and iron filings, being mixed with water, soon become too hot to be touched ; and in a little time emit flame and vapour. And if iron, oil of vitriol, and water, become mixed together, there will instantly arise a violent ebullition, with fumes copiously exhaling ; and which are so very inflammable, that if set on fire, they go off at once with a loud explosion. The same is also effected by fermentation. Instances of very strong elastic vapours, produced this way, are so common and obvious, that particular cases need not be mentioned. All separable, mixt and compound bodies, may be the subject of this operation : and the easier they are separable, whether by means of water, air, or heat, the more readily they ferment.—And when they do ferment, they will produce a vapour more or less strong, according to the quantities of the fermenting matter, and the degree of the fermentation. But in no method is a more powerful vapour produced, than by fire. What an amazing effect will a small spark of this have on nitre and sulphur, when made up into such a composition as that of gunpowder ! How

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*From the phenomena which have been mentioned, it seems probable, that this elastic vapour was a fluid, of the same nature as that which is now called inflammable air.

small a quantity of this powder, when on fire, will generate a vapour of sufficient force to burst the firmest rocks! Air, by the application of fire, becomes so elastic, as to break through all opposition.—And there are many effects produced by the vapour of water, when intensely heated, which make it probable, that the force of gunpowder is not near equal to it. And, in general, all combustible bodies are capable of being turned into vapour, by the action of fire.—And fire seems to be a fluid, which is spread through almost all bodies whatsoever. It certainly exists, in very large quantities, in the bowels of the earth.—Some parts, as the volcanoes, are actually burning, and have been throwing out fire, flame, smoke, cinder, rocks and lava, for many ages.—And where there are no such appearances of it, it exists, and is diffused in great quantities. That this is the case, is evident from hot springs, the warmth that is always found in deep mines and pits, and those burning mountains that have been thrown up from the bottom of the sea.—And when collected into large quantities, its effects on water, air, the fumes of fermenting minerals, and all kinds of combustible bodies, would be to generate a vapour more or less strong, according to the quantities of minerals of which it was composed.

Thus, in the contents of the earth, we find sufficient materials for the production of the most strong, active, and powerful vapour; and such materials as do, in fact, produce most terrible volcanoes, vapours that have hove up, and broke through the surface of the earth, and earthquakes that have shaken the whole country, for twenty miles around Vesuvius and *Ætna*. And such explosions and concussions are what all those countries are subject to, which abound with sulphur, nitre, and such combustible materials,

As the contents of the earth will account for the origin, the structure of it will account for the motion and direction of a subterraneous vapour. Were the globe a perfect solid, there could be no motion of a subterraneous vapour under its surface. But this is not the case. Instead of being a perfect solid, the earth is of a cavernous structure; containing various pits, holes and caverns. Some of these are dry; others are fountains, or contain currents of water; and others abound with the fumes of fermenting minerals, and with various kinds of vapour and effluvia. That the earth is thus of a cavernous structure, is evident from the mines, springs, and currents of water, that are found below its surface, in every country, and in almost every place. And it is probable, that many of these subterraneous caverns may be of a great extent; some running in a direct, and others in long, crooked, unequal passages. And by thus winding, meeting, crossing and mixing with each other, they may form communications between very distant parts of the earth. The manner in which the solid and fluid parts of the earth are disposed, is also worthy of remark. In some places they are found promiscuously mingled and blended together, in a manner which has no apparent order or regularity. In other places, the various kinds of solids appear to be disposed with the utmost apparent regularity, in the form of different and distinct strata of clay, coals, salts, sulphur, minerals, &c. It is thus also with the fluids; in many places, they are regularly collected into quantities, or fountains, within the bowels of the earth; in others, they are constantly and regularly moving in perpetual streams and currents: some of which are charged with sulphureous particles; others with those of iron; and others, with various other tinctures and mixtures,

And from this structure of the earth, the motion of a subterraneous vapour would receive its direction. For vapours, generated and increasing in the bowels of the earth, if they found no vent upwards, must naturally take their course and rush fiercely along under the surface of the earth, according as they found subterraneous passages or strata, of proper materials to conduct them.—And it seems as if something of this nature must be the case in this part of America. That there should be a particular part of the country, as to width, to which the earthquakes of New England have repeatedly reached—that they should all be of the same kind—come from the same point—and proceed in the same path; these phenomena cannot be supposed to be the effect of what is called chance or accident. It is evident there must have been something which served as conductors. If subterraneous passages, of such extent as these earthquakes, should be admitted, it would be difficult to account for the width of the earthquakes, on that hypothesis. The more probable supposition seems to be, that there are some particular strata, which have served as fuel or conductors to the vapour. And that this was the case, seems further probable from the sulphureous mixtures that have been thrown out at the different eruptions. Instances of these eruptions are mentioned in the accounts of the earthquakes of 1727 and 1755. And they are such as make it probable, that there is some particular stratum under the surface of the country, which has served and will serve to direct the motion of the subterraneous vapour, from the places of its origin, to that of its grand final eruption.*

NOTE.

* Such strata are not at all uncommon. Many countries are known to

On this account of the causes of the earthquakes of New England, it may not be amiss to remark, that part of it seems to be matter of fact, and part matter of conjecture. As the causes lie out of sight, and beyond the reach of observation, we have no way to come to the knowledge of them, but by general reasonings from the phenomena that fall under our observation. These phenomena, I may venture to say, have been fairly related:—but whether the inferences that have been drawn from them, are just—the conjectures, such as are probable—the

NOTE.

abound with, and to be distinguished by them. “We have an instance of it in the chalky and flinty countries of England and France, which (excepting the interruption of the channel, and the clays, sands, &c. of a few counties) compose a tract of about three hundred miles each way.” Phil. Trans. for 1760, p. 587. The volcanoes in the Audes, are in all probability derived from the same stratum of combustible minerals; the extent of which cannot be less than five thousand miles—for so far do the mountains and volcanoes extend. And thus in North America, if we may give credit to L. Evans, in descending from the mountains which adjoin to the western lakes, the same sets of strata, and in the same order, are generally kept up.

In some countries, earthquakes have ceased upon the breaking out of volcanoes. If there were volcanoes in this part of America, which might serve to interrupt the stratum, and as a vent for the subterraneous vapours to discharge themselves, it is probable the earthquakes of New England would not run in such a regular manner, through such an extent of the country.

conclusions, well supported—and the evidence, such as might have been expected—these are submitted to the judgment of others. Hypotheses may be of use to put us upon further enquiry, and a more critical examination; but are never to be received, any further than they are supported by proper evidence.

General reflections on earthquakes.

THE preceding accounts, observations and conjectures, have been confined to the earthquakes of New England. But they will naturally lead us to some general reflections on the nature, use and effects of these formidable phenomena. Thus,

If we are right in our conjectures on the causes of earthquakes, we may conclude, that the globe always has been, and will be subject to such convulsions. From the earliest ages, of which we have any accounts, this has been the case. Many parts of the earth bear the marks of great and furious eruptions; not a few of which, were prior to all historical monuments and records. The eruptions of the noted *Ætna*, may be traced back an hundred years before the siege of Troy.* *Vesuvius* was a volcano before the foundations of *Herculaneum* and *Pompeii* were first laid. These cities were covered by an eruption of *Vesuvius*, A. D. 79. Their foundations and pavements are all of that melted and vitrified substance called lava, which *Vesuvius* had thrown out;—which is a proof of great eruptions, prior to the foundations of these cities.† How long these volcanoes, or those in *Iceland*, the *East-India* islands, and *South-America*, have been burning,

we have no history or tradition ancient enough to inform us. Many of their effects bear the marks of more furious eruptions than any there have been in modern times. The soil for more than twenty miles round *Naples*, by its cinder, stones, burnt matter and lava, appears to have been the productions of very ancient subterraneous fires, earthquakes and eruptions.‡ The *Appenines*, a chain of mountains which divide the continent of *Italy* from north to south, and extend even to *Sicily*, discover many tokens of an internal fire; and were judged, by that celebrated philosopher, *M. de la Condamine*, to be a chain of ancient volcanoes. This is also the case with that long chain of mountains in *South-America*, known by the name of the *Andes*. These mountains run from 45° south latitude, to several degrees north of the line, and also throughout all *Mexico*; being, according to *Monf. Bouguer's* account, five thousand miles in extent. The series of volcanoes, formed by these mountains, is interrupted: many are totally extinguished; and there are many which are still burning; and many of the ancient ones frequently burst out again.§ Several of the *West-India* islands, the *Azores*, *Teneriffe*, and most mountains, either contain volcanoes, or, by the vestiges of calcination and vitrification, shew the former effects of them.—And as several islands and mountains have been sunk, so we have authentic accounts of several that have been thrown up from the bottom of the sea, by subterraneous fires. Such effects, with the relations of history, afford plentiful evidence, that the globe has always been subject to and greatly af-

NOTES.

* According to *M. D'Orville*.

† *Phil. Transf.* for 1771. Art. 1.

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‡ *Phil. Transf.* for 1771. Art. 1.

§ *Condamine's* travels into *Italy*.

fects by subterraneous fires, earthquakes, and volcanoes.

The same causes which have produced such effects on the surface, are undoubtedly still existent in the bowels of the earth. Proper periods of time may be requisite for them to grow ripe, or gather strength sufficient to cause an explosion or earthquake. But as the materials from which subterraneous vapours are formed, constantly exist in the bowels of the earth, they will be as constantly fermenting; and thus increasing the quantity and force of the vapours, till they shall become sufficient to break through all opposition, and force for themselves a passage thro' the earth. And although they may in such ways be discharged from time to time—yet, so long as the same powers shall subsist in matter, new vapours will be produced; and, of consequence, the same effects, after proper intervals of time, will again take place. Nor are they to be viewed as marks of any disorder or irregularity in the works of nature. For,

Notwithstanding all their terrible effects, earthquakes seem to be a necessary consequence of such laws of nature, and powers in matter, as are, upon the whole, greatly beneficial to the globe. There is no phenomenon in the whole course of nature, so formidable as that of an earthquake. Nor is there any that has spread more universal horror, calamity, and desolation. History, ancient and modern, abounds with accounts of large countries that have been shaken—whole cities that have been sunk and covered—and immense numbers of mankind that have been destroyed, by these dreadful convulsions of nature. In the earthquake which shook Sicily, in the year 1693, fifty-four cities and towns, with an incredible number of villages, were either destroyed or greatly da-

maged, and about sixty thousand persons perished. In that at Jamaica, in 1692, almost the whole of Port-Royal was swallowed up, and large numbers of its inhabitants buried in its ruins. And in the earthquake at Lima in Peru, in 1746, all the buildings in that city, and in the port of Callao, except about thirty, were sunk, or laid in ruins, and great numbers of people destroyed—four hundred and fifty-one shocks, many of which were equal to the first, succeeding in the space of four months. The destruction of Lisbon, by the earthquakes in 1755, was also attended with the most tragical scenes of desolation, death and misery. And yet, notwithstanding all these dire effects of earthquakes, it is very possible, that the laws and causes from whence they arise, may be a necessary provision, and a real advantage to the globe. The power of gravity, the wind and water, rain, heat, and cold, have occasioned the destruction of vast numbers of mankind: and yet they are a general advantage to the earth, and to its inhabitants, and such an advantage, that no creature could live on this globe without them. And since they produce an overbalance of good, they are to be esteemed advantageous and beneficial upon the whole; although in some particular cases, they may be attended with very dangerous and fatal effects. This, it is probable, is the case with all the laws, powers and operations of nature; and with all those agitations and concussions to which the earth is subject.

To enumerate all the ends to which these formidable phenomena may serve in the natural world, would require higher degrees of knowledge than it is probable we shall ever have of this subject. And yet, perhaps, we may see enough to convince us of the wisdom and benevolence of the Creator, in making the globe sub-

ject to such concussions. These extensive and powerful agitations tend to weaken the attraction, loosen the parts, and open the pores of the earth; and thus to fit and prepare it for the purposes of vegetation, and for the various kinds of produce that are necessary for the support of animal life. Were an insuperable bond of attraction to take place on the surface, or in the bowels of the earth, without something to oppose its power, fluidity, motion, vegetation, and all nature would be at a stand. The power of gravity tends to this: and hence we find it necessary, by the operations of agriculture, to break the surface of the earth, to loosen its parts, and open its pores, and thus weaken its attraction, that it may be fit for the production of such fruit and grain as we want in the course of the year. An earthquake performs that in the bowels of the earth, which the various methods of agriculture perform on its surface. And it is probable, that the former is equally necessary to the purposes of vegetation, as the latter. And, what seems to confirm these conjectures, it is observable, that those places which are most subject to earthquakes, are the most noted, *ceteris paribus*, for the fruitfulness of their soil, and the plenty of their produce. Thus Italy, Peru, Manilla, and especially *Ætna* and *Vesuvius*, places greatly subject to earthquakes, are celebrated for an uncommon fertility. There are other important ends which may be answered by earthquakes. Those subterraneous vapours, by which they are caused, seem necessary to prevent the inward parts of the earth from becoming too dense, compact, and hard, in consequence of their attraction. And when these vapours are collected in large quantities, it may be necessary to have them discharged into the atmosphere, to prevent a dissolution of the globe through the

force of their elasticity or repulsion. It may also be necessary to have new subterraneous passages opened—old ones diverted from their former courses—and new communications established between different countries—that all parts of the earth may be supplied with such kinds and quantities of water and air, as the growth of bodies, in the bowels and upon the surface of the earth, may require; and that the solid and fluid parts of the earth may be kept in their due place, connection, and order. And, in general, we may presume, from the analogy of nature, that there may be, and no doubt are, many ends and uses to which subterraneous fires and earthquakes may serve, of which we have as yet no ideas or conjectures. But however these things may be,

It is probable, that our knowledge of this subject will increase, as all other branches of natural knowledge have done, and by the same means, observation and reasoning. In the contents and structure of the globe, the Creator of it seems to have made provision for the production of subterraneous vapours and explosions. Earthquakes may of consequence be expected, at proper intervals of time, in every country and climate, so long as the earth shall continue to exist in its present form. As these events happen, posterity will have opportunity to examine their phenomena, to note their effects and operations, and to mark all their differences and agreements: and, of consequence, they will be obtaining more and more insight into their nature, causes, and effects. The methods of reasoning which are now happily introduced into philosophical subjects, though their effects may be slow, are yet certain and progressive. Every age will be doing something for the next.—And the several philosophical societies already established, by collecting

and recording observations, are, and will be, providing materials for the ages that are to come.—And when a sufficient number of observations shall be thus collected, inferences may be drawn, and conclusions may be formed from them, of which, as yet, we have not the least thought or suspicion. It has been thus in all other branches of philosophy: and the same accuracy of observation and reasoning, when applied to the philosophy of earthquakes, will probably bring to light things, of which we have now no knowledge or conception.

From any knowledge we yet have of the nature and causes of earthquakes, nothing would appear more romantic, than to attempt to predict when such formidable concussions will happen. We know so little of their causes, much less when these causes will have collected sufficient force to burst forth and shake the adjacent country, that we have no way to form any rational conclusions as to the time when an earthquake will happen, from any inferences founded on the knowledge of the nature and operations of their causes. Nor can we receive much, if any, help from any preceding signs:—I do not mean those which fear and superstition have formed; but from any regularity of their periods—state of the atmosphere—uncommon motion of wells, springs, and the like. For if there is any connection between things of such a nature, and the happening of an earthquake, it is what we do not understand.

But our ignorance of these things ought not to be made an argument, that there is not in reality any regularity or order in these events; or that it will always be impossible to discover so much of the nature and operations of natural causes, as to discern the same simplicity, order and harmony, in the several pheno-

mena of earthquakes, as are apparent in many other works and operations of nature. In all those works of nature, of which we have any tolerable conceptions, stated laws, and a steady regard to them, have been observed. And this has been manifest and apparent in the same degree as our knowledge of any subject has been advanced. There was a time when universal confusion and disorder were supposed to prevail in the courses, motions and appearances of the heavenly bodies. But as the knowledge of the true astronomy increased, the most perfect order, harmony and proportion have been discovered in the motion and appearance of every star, planet and comet. And it is now well known, that all the supposed irregularity in any of these bodies, was nothing more than want of knowledge, and confusion of ideas in the observer. If we may reason from analogy, the conclusion will be, that it is the same in all other cases. It can hardly be doubted, therefore, but that there is the same harmony, rule, and order—the same general and stated laws, in the causes and operations of earthquakes, as there are in all other events of nature. No reason can be assigned why these alone, of all the works of God, should be made up of irregularity and confusion. It must, therefore, be supposed, that earthquakes (like all other events that depend on natural causes) are subject to certain and determinate laws and rules—which are in themselves constant, regular and harmonious, whether these laws, or this regularity, are known to us or not.

The ancient Egyptians and Chaldeans, by a long course of observations, are said to have been able to foretell the appearance of comets, and the approach of earthquakes.*

NOTE.

* Diod. Siculus.

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The greatest philosophers have supposed their predictions of this kind were founded not on any knowledge they had of the laws and powers of nature, but on the vain arts of judicial astrology. This might be the case. It is, however, to be wished, that we could be a little more certain what knowledge the Egyptians pretended to in this matter. It is well known, that the sciences were much cultivated among that discreet people. Geometry and astronomy, if they were not begun, received very great improvements from them. The Greeks had all their astronomical learning from Egypt. Pythagoras got the knowledge of the true system of the universe from the Egyptian priests. And their advances in several parts of the mathematics, were great and uncommon. How far they were acquainted with the astronomy of comets, I am not able to say. Some of the Chaldeans, and Pythagorean philosophers, taught many things as to the nature, orbits and revolutions of comets; which, though long disregarded, modern astronomy has adopted, and abundantly confirmed.* And that there was nothing impossible—nothing romantic, in attempting to predict their appearance, the great Halley has fully demonstrated. And whether they might not have some knowledge as to the philosophy of earthquakes, which, thro' the ignorance and barbarousness of after ages, might be lost to the world, seems worthy of enquiry.

But however this may have been, it is at least possible, that regularity, order and laws may be discovered in these, as well as in other works of nature. It is, indeed, but very little that is yet known of the nature,

NOTE.

* Gregory's astronomy. Book v. sect. 1.

causes and operations of these events. It will, probably, require the observations of many ages to digest and form them into a proper system. And a long course of observations may open new scenes to posterity, and enable them to form conclusions—I had almost said predictions—which to us would appear wild, absurd and ridiculous. To me there appears as much ground for such a conjecture, as Seneca had seventeen hundred years ago for his, relative to comets; but which has literally been fulfilled.† But leaving these things to the ages that are to come,—

From contemplating these mighty works of nature, a philosophic mind will naturally rise in admiration and reverence, to the first great cause of all! In all the works of nature, we find plain marks of that wisdom, power and goodness, with which the whole plan, frame, and constitution of it, was first formed and adjusted. As all natural effects take place in consequence of causes and laws derived at first from God, true philosophy agrees with the holy scriptures, in ascribing all such events to his agency. It was no doubt with a view ultimately to moral purposes, that the laws of nature were first established: and nothing can be better adapted than many of their operations, to awaken and direct the attention of mankind to the supreme Governor of the world. By the operation of natural causes, the Deity often

NOTE.

† “A time,” said this excellent philosopher, “will come, when those things which now lie hid, will at last be brought to light, by length of time and the diligence of posterity: for it is not one age that is sufficient to make such great discoveries.” Seneca, Nat. Quest. lib. vii. chap. 25. May we not venture to say the same of earthquakes?

“arise to shake terribly the earth.”
 “He looketh on the earth, and it trembleth: he toucheth the hills, and they smoke.” “He removeth the mountains, and overturneth them in his anger.” “The pillars of heaven tremble, and are astonished at his reproof.”

Amidst such convulsions of nature, strong impressions of the power and majesty of God, will naturally take possession of the human mind. Mankind will see and feel their dependence upon their Creator—with the wisdom, benefit and advantage of such a steady course of virtue, as leads to an habitual trust in his providence and protection. Such unusual and great events will powerfully awaken their attention to morals, and thus promote the advantage, although it may occasion loss and terror to mankind.

To pretend to be above fear, or to attempt to be unmoved with such convulsions of nature, would argue, on the one hand, a folly or a pride unworthy a philosophic mind: and on the other, to give way, at every such event, to such confusion of thoughts and passions, as leaves no command over the mind, is a weakness as much as possible to be avoided. Of this we may at all times be certain—the present frame of nature will subsist so long as infinite wisdom and goodness see it to be fit. And no event will ever take place in the natural world, which was not foreseen by him who is the Author of nature, and designed to answer some wise and benevolent purpose. Of his favour mortals may be sure, so long as they maintain a steady regard to the rules of virtue. This will always be productive of safety and happiness; though the immediate effect of the present convulsions of nature, will probably be as the poet says,
Terra tremit: fugere feræ, et mortalia
corda

Per gentes humilis stravit parvor.

*Circular letter, from the speaker of the house of representatives of the province of Massachusetts bay, addressed to the speakers of the legislatures of the other provinces.**

Sir, Boston, June, 1765.

THE house of representatives of this province, in the present session of the general court, have unanimously agreed to propose a meeting, as soon as may be, of committees, from the houses of representatives or burgesses of the several British colonies on this continent, to consult together on the present circumstances of the colonies, and the difficulties to which they are, and must be reduced, by the operation of the acts of parliament for levying duties and taxes on the colonies; and to consider of a general and united, dutiful, loyal, and humble representation of their condition, to his majesty and the parliament, and to implore relief. The house of representatives of this province have also voted to propose, that such meeting be at the city of New York, in the province of New York, on the first Tuesday in October next; and have appointed a committee of three of their members to attend that service, with such as the other houses of representatives, or burgesses, in the several colonies, may think fit to appoint to meet them. And the committee of the house of representatives of this province, are directed to repair to said New York, on said first Tuesday in October next, accordingly.

If, therefore, your honourable house should agree to this proposal, it would be acceptable, that as early notice of it as possible, might be transmitted to the speaker of the house of representatives of this province.

N O T E,

* This letter gave rise to the meeting of the first American congress.—C.

Declaration of the rights of the colonists of America, as agreed to by the first American congress, at New York, October 19, 1765.

THE members of this congress, sincerely devoted, with the warmest sentiments of affection and duty, to his majesty's person and government—inviolably attached to the present happy establishment of the protestant succession—and with minds deeply impressed by a sense of the present and impending misfortunes of the British colonies on this continent—having considered, as maturely as time will permit, the circumstances of the said colonies, esteem it our indispensable duty to make the following declarations of our humble opinion, respecting the most essential rights and liberties of the colonists, and of the grievances under which they labour, by reason of several late acts of parliament.

I. That his majesty's subjects in these colonies, owe the same allegiance to the crown of Great Britain, that is owing from his subjects born within the realm, and all due subordination to that august body, the parliament of Great Britain.

II. That his majesty's liege subjects in these colonies, are entitled to all the inherent rights and liberties of his natural born subjects, within the kingdom of Great Britain.

III. That it is inseparably essential to the freedom of a people, and the undoubted right of Englishmen, that no taxes be imposed on them but with their own consent, given personally or by their representatives.

IV. That the people of these colonies are not, and, from their local circumstances, cannot be, represented in the house of commons in Great Britain.

V. That the only representatives of the people of these colonies are persons chosen therein by them-

selves; and that no taxes ever have been, or can be constitutionally imposed on them, but by their respective legislatures.

VI. That all supplies to the crown being free gifts of the people, it is unreasonable and inconsistent with the principles and spirit of the British constitution, for the people of Great Britain to grant to his majesty the property of the colonists.

VII. That trial by jury, is the inherent and invaluable right of every British subject in these colonies.

VIII. That the late act of parliament, entitled, "an act for granting and applying certain stamp duties, and other duties, in the British colonies and plantations in America," &c. by imposing taxes on the inhabitants of these colonies, and the said act, and several other acts, by extending the jurisdiction of the courts of admiralty beyond its ancient limits, have a manifest tendency to subvert the rights and liberties of the colonists.

IX. That the duties imposed by several late acts of parliament, from the peculiar circumstances of these colonies, will be extremely burdensome and grievous; and, from the scarcity of specie, the payment of them absolutely impracticable.

X. That as the profits of the trade of these colonies ultimately centre in Great Britain, to pay for the manufactures which they are obliged to take from thence, they eventually contribute very largely to all supplies granted there to the crown.

XI. That the restrictions imposed by several late acts of parliament on the trade of these colonies, will render them unable to purchase the manufactures of Great Britain.

XII. That the increase, prosperity and happiness of these colonies, depend on the full and free enjoyments of their rights and liberties, and an intercourse with Great Bri-

tain mutually affectionate and advantageous.

XIII. That it is the right of the British subjects in these colonies to petition the king, or either house of parliament.

Lastly, That it is the indispensable duty of these colonies, to the best of sovereigns, to the mother country, and to themselves, to endeavour by a loyal and dutiful address to his majesty, and humble application to both houses of parliament, to procure the repeal of the act for granting and applying certain stamp duties, of all clauses of any other acts of parliament, whereby the jurisdiction of the admiralty is extended as aforesaid, and of the other late acts for the restriction of American commerce.

Address to the king of England agreed to by the first American congress, October 22, 1765.

To the king's most excellent majesty : the petition of the freeholders and other inhabitants of the Massachusetts-bay, Rhode island, and Providence plantations, New Jersey, Pennsylvania, the government of the counties of Newcastle, Kent, and Sussex, upon Delaware, and province of Maryland,

Most humbly sheweth,

THAT the inhabitants of these colonies, unanimously devoted with the warmest sentiments of duty and affection to your majesty's sacred person and government, inviolably attached to the present happy establishment of the protestant succession in your illustrious house, and deeply sensible of your royal attention to their prosperity and happiness, humbly beg leave to approach the throne, by representing to your majesty, that these colonies were originally planted by subjects of the British crown, who, animated with the spirit of liberty, encouraged by your majesty's royal predecessors, and confiding in

the public faith, for the enjoyment of all the rights and liberties essential to freedom, emigrated from their native country to this continent, and by their successful perseverance in the midst of innumerable dangers and difficulties, together with a profusion of their blood and treasure, have happily added these vast and valuable dominions to the empire of Great-Britain. That for the enjoyment of these rights and liberties, several governments were early formed in the said colonies, with full power of legislation, agreeable to the principles of the English constitution.

That under those governments, these liberties, thus vested in their ancestors, and transmitted to posterity, have been exercised and enjoyed, and by the inestimable blessings thereof (under the favour of Almighty God) the inhospitable deserts of America have been converted into flourishing countries; science, humanity, and the knowledge of divine truths, diffused through remote regions of ignorance, infidelity, and barbarism; the number of British subjects wonderfully increased, and the wealth and power of Great Britain proportionably augmented.

That by means of these settlements, and the unparalleled success of your majesty's arms, a foundation is now laid for rendering the British empire the most extensive and powerful of any recorded in history. Our connection with this empire, we esteem our greatest happiness and security, and humbly conceive it may now be so established by your royal wisdom, as to endure to the latest period of time; this, with most humble submission to your majesty, we apprehend will be most effectually accomplished, by fixing the pillars thereof on liberty and justice, and securing the inherent rights and liberties of your subjects here upon the principles of the English constitution. To this constitution these two principles

are essential, the right of your faithful subjects, freely to grant to your majesty, such aids as are required for the support of your government over them, and other public exigences ; and trials by their peers : by the one they are secured from unreasonable impositions ; and by the other from arbitrary decisions of the executive power.

The continuation of these liberties to the inhabitants of America we ardently implore, as absolutely necessary to unite the several parts of your wide extended dominions, in that harmony so essential to the preservation and happiness of the whole. Protected in these liberties, the emoluments Great Britain receives from us, however great at present, are inconsiderable, compared with those she has the fairest prospect of acquiring. By this protection she will for ever secure to herself the advantage of conveying to all Europe, the merchandises which America furnishes, and of supplying through the same channel whatever is wanted from thence. Here opens a boundless source of wealth and naval strength ; yet these immense advantages, by the abridgment of those invaluable rights and liberties, by which our growth has been nourished, are in danger of being for ever lost ; and our subordinate legislatures, in effect, rendered useless, by the late acts of parliament imposing duties and taxes on these colonies, and extending the jurisdiction of the courts of admiralty here, beyond its ancient limits : statutes by which your majesty's commons in Britain undertake absolutely to dispose of the property of their fellow subjects in America, without their consent, and for the enforcing whereof, they are subjected to the determination of a single judge in a court unrestrained by the wise rules of the common law, the birth-right of Englishmen, and the safeguard of their persons and properties.

The invaluable rights of taxing ourselves, and trial by our peers, of which we implore your majesty's protection, are not, we most humbly conceive, unconstitutional ; but confirmed by the great charter of English liberty. On the first of these rights the honourable the house of commons found their practice of originating money bills, a right enjoyed by the kingdom of Ireland, by the clergy of England, until relinquished by themselves, a right, in fine, which all other your majesty's English subjects, both within and without the realm, have hitherto enjoyed.

With hearts, therefore, impressed with the most indelible characters of gratitude to your majesty, and to the memory of the kings of your illustrious house, whose reigns have been signally distinguished by their auspicious influence on the prosperity of the British dominions, and convinced by the most affecting proofs of your majesty's paternal love to all your people, however distant, and your unceasing and benevolent desires to promote their happiness, we most humbly beseech your majesty, that you will be graciously pleased to take into your royal consideration the distresses of your faithful subjects on this continent, and to lay the same before your majesty's parliament, and to afford them such relief, as in your royal wisdom their unhappy circumstances shall be judged to require.

And your petitioners as in duty bound will pray.

Memorial to the house of lords, agreed to, same day as the preceding address.

To the right honourable the lords spiritual and temporal of Great-Britain, in parliament assembled : the memorial of the freeholders and other inhabitants of the Massachusetts-bay, Rhode-Island, and Providence plantations, New-Jersey, Pennsylvania, the government of the counties of New-

Castle, Kent, and Suffex, upon Delaware, and province of Maryland,

Most humbly sheweth,

THAT his majesty's liege subjects in his American colonies, though they acknowledge a due subordination to that august body the British parliament, are entitled, in the opinion of your memorialists, to all the inherent rights and liberties of the natives of Great Britain, and have ever since the settlement of the said colonies, exercised those rights and liberties, as far as their local circumstances would permit.

That your memorialists humbly conceive one of the most essential rights of these colonies, which they have ever, till lately, uninterruptedly enjoyed, to be trial by jury.

That your memorialists also humbly conceive another of these essential rights to be, the exemption from all taxes, but such as are imposed on the people by the several legislatures in these colonies, which right also they have, till of late, freely enjoyed.

But your memorialists humbly beg leave to represent to your lordships, that the act for granting certain stamp-duties in the British colonies in America, &c. fills his majesty's American subjects with the deepest concern, as it tends to deprive them of the two fundamental and invaluable rights and liberties above mentioned, and that several other late acts of parliament, which extend the jurisdiction and powers of courts of admiralty in the plantations, beyond their limits in Great Britain, thereby make an unnecessary and unhappy distinction as to the modes of trial, between us and our fellow subjects there, by whom we never have been excelled in duty and loyalty to our sovereign.

That from the natural connection between Great Britain and America, the perpetual continuance of which

your memorialists most ardently desire, they conceive that nothing can conduce more to the interest of both, than the colonists' free enjoyment of their rights and liberties, and an affectionate intercourse between Great Britain and them. But your memorialists (not waving their claim to these rights, of which, with the most becoming veneration and deference to the wisdom and justice of your lordships, they apprehend they cannot reasonably be deprived) humbly represent, that from the peculiar circumstances of these colonies, the duties imposed by the aforesaid act, and several other late acts of parliament, are extremely grievous and burdensome, and the payment of the said duties will very soon, for want of specie, become absolutely impracticable; and that the restrictions on trade, by the said acts, will not only greatly distress the colonies, but must be extremely detrimental to the trade and true interest of Great Britain.

Your memorialists, therefore, impressed with a just sense of the unfortunate circumstances of the colonies, and the impending destructive consequences which must necessarily ensue from the execution of those acts, animated with the warmest sentiments of filial affection for their mother-country, most earnestly and humbly intreat, that your lordships will be pleased to hear their counsel in support of this memorial, and take the premises into your most serious consideration; and that your lordships will also be thereupon pleased to pursue such measures for restoring the just rights and liberties of the colonies, and preserving them for ever inviolate, for redressing their present, and preventing future grievances, thereby promoting the united interest of Great Britain and America, as to your lordships, in your great wisdom, shall seem most conducive and effectual to that important end.

*The battle between Swaran and Cuchullin, translated from Fingal
By the late dr. Ladd.*

AS from dark Cromla's solitary steep,
The foam down rushes with impetuous sweep,
When dark brown night is shadowing half the grove,
And thunder rolls all terribly above ;
So fierce, so vast, so terrible came on
The darken'd strength of Erin's dreadful son ;
Like some strong whale the chieftain rush'd before,
While far behind the mountain billows roar,
He roll'd his might along the stormy main,
And pour'd forth valour like a stream of rain.

Like winter streams, impetuous from afar,
The sons of Lochlin heard the moving war ;
First Swaran call'd, and struck his bossy shield,
The son of Arno echo'd thro' the field :
" What, like the gather'd flies of ev'ning still,
Comes rolling onward from the distant hill ?
" The stormy sons of Innisfail descend,
" Or rushing winds the gloomy forest rend :
" Thus wintry Gormal echoes thro' the skies,
" Ere in white clouds the bursting billows rise.
" Go, Arno's son, and from the mountain's head,
" View the dark valley whence the murmur spread."

Trembling he went, and swiftly he return'd,
His eyes roll'd wild, and in their sockets burn'd ;
Slow, weak, and broken were his words express'd,
His heart beat high, and labour'd in his breast.

Rise, son of ocean, view the fields—
Arise, thou chief of dark-brown shields ;
For see—deep moving from afar,
The dark—the mountain stream of war—
The car—the car invades the heath—
The rapid car of gloomy death :
Behold it comes all dreadful on—
Cuchullin's car—old Semo's son,
Like ocean's wave behind it bends,
As golden mist the heath ascends ;
The stone-boss'd sides shed sparkling light,
Like seas around the boat of night ;
The beam of polish'd yew display'd,
The seat of smoothest iv'ry made ;
The sides with glitt'ring spears are crown'd
And heroes press the bottom round,
Full on the right with rapid course,
Behold the proudly-snorting horse,
Son of the hill (a gen'rous breed)
High-leaping, strong, broad-breasted steed ;
His hoof, with loudly echoing sound,
All dreadful thunders o'er the ground ;
Above him spreads the flowing mane,
As streams the smoke on yonder plain ;

His sides reflect a beamy flame,
And Sulin-Fadda is his name.

Full on the left to deeds of war,
Dufronnel hurls the rapid car,
The lofty, bounding, thin-man'd horse,
Strong hoof'd and matchless in the course.
A thousand thongs the car intwine,
In foam the polish'd bridles shine;
The thongs, which girths, bright-studded, deck,
Bend o'er each courser's stately neck:
The courser—who with slacken'd reins,
Like mist fly o'er the streamy plains;
No deer more rapid, wild than they,
No eagle stronger on her prey;
Like winter blasts their echoes spread,
Which roar from Gormal's snowy head.

And see the chief within the car,
The strong tempestuous son of war;
'Midst clashing arms, Cuchullin dwells,
Old Semo's son, the king of shells:
His ruddy visage, to the view,
Shines like my brightly-polish'd yew:
Beneath his brow with darken'd mien,
The wide, blue-rolling eye is seen.
As bending on, he shakes his spear,
Behind him spreads his flaming hair:
Fly, king of ocean, fly; like death
He comes along the streamy heath.

“ When did I fly !” the stormy king reply'd,
“ From many spears that battled at my side ?
“ When, son of Arno, from the loud affray
“ Did I retire ? thou coward chieftain say :
“ Dark Gormal's storm I met ; my ways foam'd high,
“ Loud rag'd the heav'ns, but Swaran did not fly ;
“ Nor shall he fly—tho' Fingal's self were here,
“ The soul of Swaran could not yield to fear—
“ Rise to the war my thousands, crowd the plain,
“ And pour around me like the echoing main ;
“ Round the bright steel of gloomy Swaran stand,
“ Strong as the rocks, the mountains of my land,
“ That meet with joy, the storms which round them
“ pour,
“ And stretch their dark woods to the tempest's roar.”

As from two hills loud thund'ring to the deep,
The darken'd storms of gloomy autumn sweep,
So fierce, so dreadful o'er the field of fame,
In swift approach the gloomy warriors came :
As from high rocks two streams of gloomy rain,
Meet, mix and foam, and roar upon the plain,
Loud, rough and dark th' embattled chiefs appear ;
There Innisfail, tremendous Lochlin here :

On clanging steel, the clanging steel resounds,
 Men mix with men, and chieftain chieftain wounds;
 Bursts forth the gushing blood, and smokes around,
 And iron helmets, cleft on high, resound;
 Along the sky the rushing jav'lines sing,
 The polish'd bows remurmur to the string,
 And spears fall glimm'ring like the beams of light,
 That gild the dark face of tempestuous night.

As troubled noises of the ocean rise,
 When the loud waves roll mountains to the skies;
 As the last peal heaven's awful thunder yields,
 Such is the noise of the embattled fields.
 Though Cormac's hundred bards their notes prolong,
 To sound the contest in immortal song,
 Weak is the voice an hundred bards could raise,
 To give the slaughter to succeeding days:
 Unnumber'd warriors on the field were spread,
 And wide the blood stream'd of the valiant dead.

Mourn, mourn ye bards, for silent in the grave
 Sithallin lies, the noble and the brave:
 Let fair Fiona's melancholy sighs,
 On the dark heaths of her lov'd Ardan rise:
 Like two fair deer they stood, but ah! the steel
 Of Swaran lighted, and the warriors fell:
 'Midst all his thousands, Swaran roar'd aloud
 Like the shrill spirit of a stormy cloud,
 That dim on Gormal, sees cold death enslave
 The sailor hapless in the flashing wave.

Nor yet inactive slept thy hand the while,
 Undaunted chieftain of the misty isle;
 Cuchullin's steel in warrior blood was dy'd,
 And death was round him terrible and wide:
 His sword the war like lightning overturn'd,
 When men are blasted, and when hills are burn'd.
 O'er heaps of dead, Dufronnel snorted loud,
 And strong Sith-Fadda bath'd his hoofs in blood.

Behind their car appear'd the scene of death,
 Like groves o'erturn'd on Cromla's desert heath,
 When roaring winds across the plain have past,
 And night's dim spirits ride upon the blast.

Weep on the rocks of roaring storm,
 O beauteous maid of Innistore;
 Bend o'er the waves thy lovely form,
 For, ah! the warrior is no more.

Mourn, mourn the desert rocks among,
 Thou fairer than the spirit pale,
 Which on a sun beam moves along,
 At noon o'er Morven's silent vale.

He's fall'n! the youth is pale and low,
 Beneath Cuchullin's sword he lies;
 No more his valour's gen'rous glow,

'To match the blood of kings shall rise ;

Trenar, sweet maid, is in his tomb,

'The lovely youth is ever lost,

His grey dogs howl around their home,

And see his plaintive shiv'ring ghost.

Within his hall the stranger stands

His polish'd bow, unstrung and bare ;

No found is in his heath of hinds ;

'Tis all a mournful silence there.

On comes bold Swaran with impetuous roar,

As to the rocks a thousand billows pour ;

As some high rock a thousand billows braves,

So fierce Cúchullin met the king of waves.

And now death raises all his voice around,

The clashing shields mix dreadful with the sound ;

A cloud of darkness ev'ry hero stands,

The sword is fire which lightens in his hands.

As o'er the anvil with tumultuous noise,

With thund'ring din an hundred hammers rise ;

From wing to wing the sounds of battle fly,

And the wide fields re-echo to the cry.

Who, dark and gloomy, like the clouds of rain,

'With fwords of lightning, move across the plain ?

The rocks are shook with all their shaggy moss,

And hills around them tremble as they pass.

Who but the king of waves, and Semo's son,

(The car-borne Erin) come all dreadful on?

What anxious eyes view dim upon the heath,

The adverse warriors meditating death.

But now within her gather'd clouds, the night

Conceals the heroes, and delays the fight.



The happy man.—By the same.

BLEST with the joys impassion'd fathers know,
And all that heav'n could in a wife bestow:

A wife endear'd to that congenial breast,

In three sweet prattlers most supremely blest.

Blest with enjoyments that on wealth attend,

And blest by heav'n with many a social friend ;

In calm delight, whose ever-fading rays

Spread a sweet fun-shine o'er thy happy days :

And blest to know, that high enroll'd in fame,

Ages shall love and venerate thy name.

To ev'ry friend thy mem'ry dear shall be,

And sweet the song be, when they sing of thee—

Oh ! read this verse, where blessings all combine,

And view thyself in each descriptive line.

Foreign Intelligence.



Paris, April 3.

THE same family compact by which the king of Spain claims 24,000 men of France, authorises the emperor to demand a similar succour of 24,000 troops, or 24 millions of money, of the court of Versailles, which succour was stipulated to be granted in case the emperor, or the allies he is bound to assist, are attacked. We are assured, that the count de Mercy Argenteau, the imperial ambassador, has received some fresh instructions from his court, charging him to represent to the king of France, that he ought to grant the required succour of 24,000 men.

London, April 10.

The budget, which the minister intends opening on Monday se'enight, will shew the national finances in a very respectable point of view. The great attention paid to the collection of the various taxes, and the new regulation in the different offices, have tended to benefit the revenue in a very considerable degree, so much, that it is said there will be a million surplus this year, (besides the appropriated one.) From this surplus, the expences attending the late armaments will be deducted, which were in the whole about four hundred and twenty thousand pounds; a net sum will then remain of five hundred and eighty thousand pounds, which, no doubt, Mr. Pitt will apply in a manner highly beneficial to the state.

It seems at last to be generally understood, that the Spanish armaments are designed to oppose the progress of the Russian fleet. It certainly is neither the interest of this country or of France, that the Turks should be annihilated, or that the imperialists

should succeed in their present views; and as France cannot interfere without risking a quarrel with the house of Austria, nor our court take a part without incurring the enmity of the French, it is not in the least extraordinary, that both kingdoms should be mere spectators of those operations to which they must secretly wish success.

April 12. The preparations over all the north of Ireland, for emigrating to America, are truly alarming; not less than six hundred passengers have engaged to sail aboard one vessel, the *Alexander*, captain Pinkerton, now lying at Londonderry.

The present minister seems determined to tax the luxuries of life—the tobacco trade is speedily to be put under excise—that will be followed by an excise on sugars, which must produce an immense revenue.

April 23. Letters from the continent by the last mail assure us, that the famous Paul Jones, who is at present at Copenhagen in Denmark, has made an offer of his services to the empress of Russia, which has been accepted. He is engaged on a very advantageous footing, and it is supposed will command a division in the Russian fleet.

At Covent Garden, on Monday last, cucumbers were sold at five shillings each; asparagus at nine shillings, and French beans at four shillings and six pence, a hundred.

A letter from Vienna, dated March 24, says, "At Chatim, a party of two thousand Turks were repulsed in an unsuccessful attack upon our troops."

"A party of Turks embarked at New Orsova, with a design to surprise one of our advanced pickets, but were repulsed with loss."

"Count Wartenleben detached a body of Turkish volunteers, to attack a transport of two hundred hor-

ses loaded with provisions, and guarded by one thousand of their countrymen. The volunteers acquitted themselves well, took part of the provisions, and obliged the Ottomans to retreat precipitately with the remainder."

The article in the treaty with Holland, which causes the present demur, is that which allows a free navigation to the Dutch spice islands. If the minister can accomplish this, it will make his peace with the East India company, and reconcile them to all his usurpations.

The final signature of the treaty between England and Prussia, will, it is confidently said, be immediately followed by a marriage between the two royal houses.

The queen is now pregnant of her sixteenth child.

April 24. Sir William Pepperel and a committee of American loyalists had an interview on Saturday with Mr. Pitt, at his house in Downing street, concerning the future provision to be made by government for those unfortunate people.

The parliament of Thoulouse, who have long and gallantly stood up, in defence of their privileges, exerted themselves so much of late against *lettres de cachet*, that orders were sent down to seize the president! this was done: but before the officer could convey away his prisoner, a numerous multitude rose, and contrary to the remonstrances of the president himself, released him. In the evening, he returned of his own accord to the officer, and begged he would obey the king's commands; but the officer, alarmed by the menaces of the people, who had declared that in defence of their privileges, thus attacked, they would readily meet death, excused himself from taking the president along with him; and returned to Paris, to report the issue of his orders.

The articles of the last peace are thought so ignominious in America, that our commanders have been ashamed to execute them; and all the posts on the upper lakes, which are the keys of the fur trade, and were by the treaty to be given up to the congress, are still in our possession; and, as they have been recently fortified and put in order, most probably will remain so.

It can hardly be said that literary propensities are diminished. There are not fewer than thirty thousand volumes upon sale this year in the different catalogues published by the London booksellers, besides those offered for sale in the different parts of the united kingdoms.

The intention of the Spaniards, and the account of their armaments, are so far from being unsatisfactory, that it has been notified to the court of Madrid, that no obstacle would be thrown in the way of such intention being carried into execution, by the British nation.

The house of commons of Ireland, on the 8th inst. received a message from the lords, by two of the judges, that their lordships had passed an engrossed bill, for repealing the act of the thirty third of Henry the eighth, which restricted a native of that country from being lord deputy or chief governor of that realm, and desiring the concurrence of the house, when the honourable Mr. Secretary Fitzherbert informed the house, that he was directed by his excellency the lord-lieutenant, to acquaint the house, that his majesty having been informed of the purport of the said bill, had consented, so far as his interest is concerned, that the house might do therein as it should think fit.

The question on the Irish mint is now before the privy council. The granting of it is with the prerogative of the crown.

The receipt of taxes last year is said to exceed sixteen millions sterling.

Yesterday morning, between five and six o'clock, upwards of one hundred convicts were taken out of Newgate, and sent to Woolwich till the ships are ready to carry them to Botany Bay.

The parliament of Rennes have at last registered the protestant edict without any alteration.

The count de Chalons is recalled from exile, and the parliament of Thoulouse are ordered to Versailles.

The Turkish army, consisting of thirty thousand men, cantoned in Moldavia, and in the neighbourhood of Choczim, is in sight of the imperial army, consisting of twenty four thousand; and it was expected, by letters of the 15th of March, that an action would soon take place.

The fermentation in France increases so rapidly, and the parliaments and people are so resolved to oppose the despotism which the minister wishes to establish, that the court of Versailles is in the utmost embarrassment—so much so, that the most pressing solicitations of the dutchess, in favour of the duke of Orleans, have been refused: and so jealous and apprehensive of a revolt is the minister, that he has convinced the king, that it would be dangerous to confide the army on the frontiers to the prince of Conde: consequently another arrangement must be made.

It is now under the contemplation of government, we are well informed, to repeal or regulate the penal statutes of this country still in force against the catholics, in order to restore them from alienism, and give them the rights and privileges of free born Englishmen, in conformity to what has been done, and is still doing, through Europe, in favour of general toleration.

On very respectable authority we have reason to believe, that the emperor has it in contemplation to give up the low countries to France, in return for her neutrality in the present war. It is certain that the emperor wishes to get rid of the Austrian Netherlands, if he could obtain an equivalent. They fret him, because he cannot govern there, as absolutely as in his hereditary dominions; and having now lost their confidence, they will be continually throwing difficulties in his way, starting obstacles, and remonstrating perpetually; this he cannot bear, being impatient of contradiction.

The Russians are said to have applied to the Dutch for transports, and to have been refused by them.

Our last letters from the continent advise, that orders had just been issued for all English and French visitors to quit the emperor's army.

A courier is arrived at Versailles from Madrid. His dispatches contain a positive refusal from the king of Spain, to permit any Russian ship of war into the ports of his kingdom, with an assurance that if any of them remain in the Archipelago, he will declare war against the empress.

Whitehall, April 19.

Yesterday afternoon Francis James Jackson, esquire, arrived at the office of the marquis of Carmarthen, his majesty's principal secretary of state for foreign affairs, with the treaty of defensive alliance between his majesty and the states general of the united provinces, which was signed at the Hague on the 15th instant, by his excellency sir James Harris, knight of the Bath, his majesty's ambassador extraordinary and plenipotentiary to their high mightinesses, and by the deputies of the states general duly authorised for that purpose.

The Turks have declared war against Poland.

No day is yet appointed for taking into consideration the petitions against the slave trade: the Liverpool people have a committee now in town to conduct the contest on their part. The debates, it is supposed, will be rather animated and pathetic than effectual, as policy is the opposing argument, which is the defendant of slavery both at home and abroad. The argument, however, may be briefly resolved into the plain question—Are any motives of policy sufficient to justify the purchase of our fellow creatures, and the use of them as slaves? when that is answered, the debate is at an end.

Such is the present posture of affairs, that we are confidently assured ministry are under the greatest apprehensions that a war must inevitably take place in consequence of the Russian fleet passing into the Mediterranean. Dispatches have been sent to Madrid on this subject, and we may shortly expect to find that naval preparations will be made.



American Intelligence.

Charleston, May 31.

A correspondent informs us, that he has it from the best authority, that the people in the back parts of this state, are very anxious to get the machines for ginning, carding, and spinning cotton amongst them; they say that then the major part of those persons who are now employed in spinning of cotton, can be taught to weave it after it is spun by the machines; and add, that it will take but few hands to gin, card and spin the cotton with the machines, to what it does now by manual labour. He mentions also, that they are determined to raise raw silk, as they

say it will not only command a good price, but will be attended with little trouble in bringing it to market, as is the case with bulky articles.

It is also said to be in contemplation to encourage the wearing of cotton velvet throughout the united states, in winter time, which is a stronger and warmer wear than broad cloth; this will encourage the raising of cotton, and will enable the northern states to manufacture all our wool into coarse cloths, for the use of our slaves, &c. He adds, that if we wish to be a united people, the states must play into each others hands as much as possible, and do all they can to serve each other, which will cement us together, so that we shall not be nominally but really a united people. It is not doubted but that France will manufacture cotton into velvet for the use of our inhabitants in winter, which will enrich us, and as we are in alliance with them, they, by strengthening and enriching us, will serve themselves in an eminent degree.

Richmond, June 18.

A letter from a gentleman in Philadelphia, to his friend in this city, dated June 9, says. "A few days since, a gentleman arrived here from Spain, who is on his way to Kentucky at this time, for the purpose of procuring thirteen or fourteen thousand hogheads of tobacco, which he has contracted with the Spanish government to supply, and to be delivered at New Orleans. He brings information, that Spain is willing to cede to us the navigation of the Mississippi, so soon as we shall have established a permanent government, to form a treaty with them."

Philadelphia, June 2.

This day, the convention of Virginia meets.

The 23d, ult. the convention of

South-Carolina agreed to ratify the new federal constitution. The votes, on putting the question, stood—

Yeas 149—Nays 73—maj. 76.

A motion, made by general Sumter, to postpone the further consideration of the constitution, was rejected the 21st.—Yeas 89, Nays 135.

Some amendments to the constitution were recommended by the above convention. [They shall appear in our next No.] The ratification of the constitution was celebrated in Charleston by a splendid procession.

The merchants of Baltimore, to express their veneration for his excellency general Washington, have presented him with the little ship federalist, the same used in the late procession. Captain Barney has sailed in her to Mount Vernon.

June 3. The legislature of Maryland has lately passed an act directing that certain species of convicts shall be employed in working on the roads; and another repealing the act for the relief of insolvent debtors.

June 4. By a letter from Baltimore we are informed that mr. Purviance, who was reported to have been killed by the savages, was met within fifty miles of Sandusky, with fourteen prisoners, all well.

Judge Symes has gone with fifty families and as many light horse to begin a settlement on the Ohio.

Advices from Rhode Island inform that the party there, in favour of federal measures, is gaining ground rapidly.

June 6. Edmond Pendleton, esq. is appointed president of the convention of Virginia.

The following article is copied from a London paper of the 26th March last: “By the latest accounts from the continent we learn, that the Indian confederacy, planned and fomented by mr. M^cGillivray, begins now to take effect, as most of the tribes on the frontiers, from Georgia

to the Ohio, are in motion in vast bodies, preparing to spread terror and desolation through the western settlements of the united states of America.

On Saturday last, the synod of New York and Philadelphia broke up, after finishing their business. During their session, they resolved themselves into four synods, and one general assembly or council. The synods are to meet annually in New York, Philadelphia, Virginia and in one of the Carolinas, from which places the synods are to derive their names. The general assembly is to meet in Philadelphia. In the pastoral letter, agreed to by the reverend synod, we hear they have strongly recommended the disuse of spiritous liquors—the abolition of negro slavery, with the instruction of the negroes in literature and religion—and the decision of all disputes among the members of their communion by means of arbitration, after the manner of the primitive christians, and of the people called quakers. Should this practice become general among all sects of christians, how much time would be saved, that is spent in idleness, by plaintiffs, defendants, jurors and witnesses at courts—how much drinking and gaming would be prevented, which are practised during the session of courts—how much expence, ill-blood, malice, and even hereditary hatreds, would likewise be prevented by it—all of which are the usual consequences of law-suits. Who knows but the effects of this christian mode of arbitrating disputes, may spread from christians to public bodies, and that it may prove the means of teaching states and kings the folly and madness of settling their disputes by an appeal to arms? Greater revolutions in the opinions and conduct of men have often arisen from much smaller causes.

A letter from Virginia, dated

June 4, says, "I have just time to inform you, that the convention this day proceeded to business; and governor Randolph declared himself decidedly in favour of the adoption of the proposed constitution, under the present situation of the united states, which is essentially different from what it was at the time he represented this state in the federal convention.—The astonishment of the opposition was greatly excited at the warmth with which he concluded his speech, declaring, that before he would consent to the rejection of the proposed plan (which would necessarily involve in it the ruin of the union) he would cheerfully agree to lose that hand which he then presented. The prospect is really pleasing: and the above circumstance is almost a certain prelude of the adoption."

A letter from Pittsburgh, dated May 13, says, "the news of this country is confined to Indian affairs, and three-fourths of the accounts have very little truth in them. It is expected there will be a general attendance of the Indians at the treaty—at present there are no appearances of hostile intentions among the savages. Some boats were attacked in March last, about six hundred miles down the Ohio; and some people killed, and others taken; among the latter is mr. Purviance of Baltimore: from circumstances attending this matter, it is conjectured some white men were principal agents in the affair."

We learn, that no less than a thousand bolls of duck, or sail cloth (which on the lowest calculation amount to thirty thousand yards) have been manufactured in Straford in Connecticut, from the commencement of the present year to about the first of April. It is supposed, that by the end of the year, there will have been made in the various parts of the state, upwards of two millions of yards, of different qualities. A specimen of this manufacture has been inspected by an experienced sea captain, and pronounced equal, if not superior, to that imported from Russia.

June 10. It is said that an affray lately happened in the state of New York, owing to difference in sentiment: on the new constitution, A col.

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Hartshorne of Fishkill lost his life therein.

June 19. A committee of congress have reported that it is expedient that Kentucke be erected into an independent state. The report has been agreed to by congress.

A letter from New York, dated June 10, says, "to-morrow is set apart, by the synod of the reformed Dutch churches, to be observed as a day of humiliation, fasting, and prayer. Among other things, it is proposed to intercede with Almighty God, that he would be pleased to inspire the members of our state convention, with wisdom from on high; that the decision of that important body may be such, as will perpetuate the civil and religious privileges of the citizens of these united states."

The porter made in this city, in the opinion of the best judges, is equal to the London porter imported into America. This porter sells for eight shillings and four pence, while the price of English porter is seventeen shillings and six pence per dozen. Two hundred barrels of this porter were lately exported from this city in one vessel.

A white glass manufactory has lately been set on foot in New Jersey, and the glass pronounced equal to the English white glass. It is sold cheaper than the imported glass.

Should every inhabitant of the united states wear as much more of the manufactures of our country, than he used to do, as would amount to twenty shillings a year, it would save three millions of pounds yearly to our country. A few pair of cotton or thread stockings, or of worsted ones, or a single coat, or a few cotton waistcoats, would make up this trifling saving to each individual. The aggregate sum would, in a few years, render America one of the richest countries in the world. It would build many hundred houses, establish and promote many useful manufactures, and clear and improve many thousand plantations, every year.

If, added to this saving in the articles that have been enumerated, every person, whose business frequently obliged him to ride on horseback, together with all the boys be-

tween five and fourteen years of age, and all the servants of the united states, wore leather breeches, manufactured in America, a sum not much less than a million per year would be retained in our country.

The manufactures of America deserve serious attention. No man can doubt the propriety, and even the duty, of using those articles that can be made here as low as they can be imported. Since the introduction of the carding and spinning machines, it is found that jeans can be made so as to undersell those imported from England, with the unavoidable charges of importation. Every public-spirited man may be supplied with this article at the factory, where the sale is very rapid; and purchases have been made by every description of the citizens of Pennsylvania, by citizens of the adjacent states, and by some foreigners of distinction. Another article calls for the most serious attention of the friends of American manufactures, and of every frugal man—thread, cotton, and worsted hosiery. Several gentlemen have made a careful and impartial examination of the stockings manufactured in this city, in Germantown, in the town and county of Lancaster, Bethlehem, and Reading: and they find that the thread stockings made in Pennsylvania, and sold generally at a dollar per pair, are of the same fineness with imported stockings, which are sold at eight shillings and four pence and eight and six pence. They also find that mixed stockings, of thread and cotton, made in Pennsylvania, are sold lower in proportion, compared with those of Great Britain. Besides this difference in price, it is a well known fact, that three pair of Pennsylvania-made stockings will wear longer than four pair of those imported. There are now about two hundred and fifty stocking looms in the different parts of the city and state, each of which makes, on a medium, one pair and a half of stockings every day. These, deducting Sundays, will amount to 117,375 pair per annum, which, at seven shillings and six pence a pair, are £.44,015 12 6. The increase of wool and flax—the reduction of labour, provisions, and rents—the cultivation of cotton in the southern states—and, above all, the use of ma-

chines to card, and spin, and twist cotton thread, will greatly promote this article, of which, at two pair to each person annually, the united states require a yearly supply of near six millions of pairs—a capital domestic demand, certain, and steadily increasing with our population. The charges on imported hosiery, under the general impost of five per cent. will be twenty three per cent. exclusive of any profit to the importer or retailer. Should the adoption of the general government tempt any, either Americans or foreigners, to push manufactures here, this branch promises great profit, and will, no doubt, be among the first that will engage their attention.

The 17th inst. after an absence of nine years, arrived in Boston, from England, his excellency John Adams, esquire, late ambassador from the united states of America, to the court of Great Britain—with his lady.

A specimen of a piece of corduroy manufactured at Beverly, has been exhibited to the honourable legislature of Massachusetts. Its texture and colour are equal to any imported from Europe—and, we hear, it can be afforded by the manufacturers, at two thirds of a dollar per yard.

June 28. The 21st. instant the federal constitution was agreed to by the convention of New Hampshire. The votes were—Yeas, 57. Nays, 46.

June 30. Last Wednesday, the convention of Virginia ratified the federal constitution. Yeas 88—nays 79.

MARRIAGES.

In Philadelphia, mr. Benjamin Morris, to miss Strettle. Mr. Daniel Deput to miss Polly Meredith.—

DEATHS.

At Burlington, William Pyne, esq. late of Exeter, in England. Mrs. Hester Hopper.

In Philadelphia, mrs. Catharine Nichols, wife of William Nichols, esquire.

At Holliston, A. Æ. 96, mr. Samuel Daniels, who has left a living progeny of above 100 persons.

In London, the rev. Charles Wesley, A. M. A. Æ. 81.

In Paris, April 13, the celebrated count de Buffon.

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